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USSR Report

HUMAN RESOURCES

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RESISTANCE TO BRIGADE METHOD NOTED AMONG PROFESSIONALS

Leningrad LENINGRADSKAYA PRAVDA in Russian 12 Jan 84 p 2

/Article by Doctor of Economic Sciences A. Markin, director of the Interdisciplinary Center group for developing the brigade forms of labor organization, and Candidate of Economic Sciences A. Merson, senior scientific associate of the Institute for Socioeconomic Problems, in the column "By a Smaller Number--Greater Production": "Potential of the Scientific Brigade"/

> /Text/ About 3 years have passed since the Leningrad Party Obkom approved an initiative of the Scientific Production Association [NPO] "Central Scientific Research and Development Institute for Boilers and Turbines /TsKTI/ imeni I. I. Polzunov" concerning introduction of the brigade form of labor organization in scientific units. During that time leader collectives, capably using scientific brigades for work under the slogan "By a smaller number--greater production," have been identified. Their experience, of which LENINGRADKSAYA PRAVDA often has written, eloquently testifies in favor of the new form of collective labor organization in science. But, unfortunately, in many scientific and planning and design institutions of the city and oblast, this experience so far has not been evaluated properly and is not being put to use. Why?

In the present 5-year plan, collective forms of organization and motivation of labor are becoming predominant in the national economy. The brigade contract on construction jobs, composite specialized brigades in industry and transportation, and cost accounting teams in the fields and on farms already have proven their effectiveness--both from the viewpoint of growth in labor productivity, and in developing a tangible relationship between labor and pay.

But how is it in science? Although a worker's labor usually lends itself to direct and sufficiently accurate evaluation, the specific outcome of a scientific associate's labor is evaluated under existing criteria extremely indirectly and approximately. It is precisely for this reason that wage leveling is encountered here and the pay for labor often does not depend upon the specialist's actual contribution to scientific and technical progress. The only thing to do is improve the organization of labor in such a way that it's effectiveness, and

consequently its earnings, may grow not because of an increase in budgetary allocations, but because of extra savings obtained from the use of developments.

It is exactly this task which may be termed definitive in the party obkom approved initiative of the NPO "TsKTI imeni I. I. Polzunov," the collective of which was the first in the city to begin shifting to the brigade form of labor organization in science. Recalling the first steps of this initiative, one cannot but note the alarm with which it was viewed in the institutes. They said that it was only a concession to fad, that such a form would not enter into general use in science. Three years have passed and, analyzing the experience of the "TsKTI imeni I. I. Polzunov," the State Optical Institute imeni S. I. Vavilov, the NPO of the All-Union Scientific Research Institute /VNII/ for Metrology imeni D. I. Mendeleyev, the NPO "Pozitron" and a number of other collectives, one may assert today, with good reason, that brigades are becoming an operative means of increasing the effectivensss of scientific inquiry.

The results of extensive research done by specialists of the USSR Academy of Sciences Institute for Socioeconomic Problems, in the course of which the quality of work of over 1,600 associates was evaluated, indicate this specifically. Here is where the unquestionable advantages of brigade forms of labor organization, both in quality and in time taken for developments, were revealed. Eight out of 10 of the qualitatively outstanding workers in the scientific research institutes /NII/ investigated work as members of brigades. In these, twice as many specialists as under the usual organization of labor complete their work on time.

It is evident in many respects, as well, that among brigade members the number of associates taking part in introducing developments into production is 1.7 times as great as for those working individually. And behind this the great activity of the people is perceived, and their concern for the end result. Whereas in the individual form of work specialists compete basically just to turn in paper work ahead of time, the results of competition in the brigades are more closely related to the final national economic effect.

It would seem that the question as to whether the thing is worth doing should no longer arise. The advantages of the brigades are obvious. So why doesn't the initative find widespread support? It appears to be time to say that, along with the positive experience which the past 3 years have brought, we also have been able to see those barriers into which the initiative has run. And perhaps the main thing is the difficulties of the preparatory stage, which most of all hold back development of the initiative.

Enough has been said already about how complicated it is in practice to calculate from scratch the norms for amounts of labor in completing one or another development. We consider that a fundamental reorganization of management, planning, accounting and motivation is required to go along with this. Typically, the majority of collectives which have organized brigades of their own have been resolving these matters at their own discretion. This becomes especially apparent in matters of brigade composition and working out regulations concerning their rights and obligations. Giving the initiative its due, one must note, nonetheless,

that such work can be strengthened today by firm recommendations for forming the brigades. This is necessary, both in order to increase the number of followers of the initiative, and in order not to repeat the mistakes of others.

This very topic was discussed at a recent seminar of specialists and executives of institutes in the Leningrad Home of Scientific and Technical Propaganda, which the Leningrad Intersector Center conducted in the presence of the Obkom, on developing brigade forms of organizing and motivating labor. The results of socioeconomic research at those institutes and scientific production corporations where there are brigades were discussed. With the entire array of actual experience at hand, the basic principles of brigade forms of labor organization in science, and the preconditions for creating those forms, may be discerned--the material and technical and the organizational.

Complaints and references concerning shortages in support personnel already have become commonplace in the institutes. Certain executives insist that a minimum of three associates performing support functions would be appropriate for each scientific specialist. Such a demand was reasonable 5-10 years ago. Today, however, the increased level of automation of support operations permits the formation of purely creative collectives numbering 20-23 persons, which may be charged with working out a project from start to finish.

This is the basis for forming scientific brigades. The most favorable conditions for them occur in those scientific and technical organizations and scientific production associations where the entire cycle, from research to placing into use, is carried out. Even before the formation of a brigade, it is important to define for it the types of work which are related to completion of a clearcut task or its stages, and which will end up with specific results. Judging from results of the research, the optimal time period for completing this set of endeavors should be 1 or 2 years. This is important because the result of brigade labor, a completed project or theme, will become the basis for planning and accounting at the institute's levels.

As for any new undertaking, the organization of scientific brigades is not without complications. An especially large number of problems is connected with composition of the brigades. Here are some specific figures: In the first stages of developing the brigade form of labor organization in science, the number of conflict situations increases by 20-25 percent. The fact by itself puts one on guard, inasmuch as it may be interpreted variously. In our view, two aspects afford the most convincing explanation: First, legal opposition from those resisting the norms and principles of labor organization in science makes itself felt; and, second, underlying many of the conflicts are costs connected with unreasoned composition of new collectives.

That is why it is important to be concerned about a normal moral and psychological climate at the very beginning. Indeed, there are quite a few collectives of this kind, in which practically no conflict situations accompany excellent end results. And this became possible primarily because in these collectives not only were the business and professional qualities of future members of the brigades carefully considered, but their psychological compatibility as well, especially when workers of different units were entering a brigade.

It is no secret that the effectiveness of everyone's labor is conditioned to a significant degree by job satisfaction in a given group. It also happens that knowledgeable, conscientious associates are satisfied with their profession for the most part, but with the work as a whole to a lesser extent. These make greater demands for labor organization and their participation in management and, indeed, by comparison with colleagues, they do not receive due compensation for their more intense labor under wage leveling. The brigade method, the essence of which is operation at a profit, permits making the pay of brigade members dependent upon the end result of their activity.

We have taken, by way of example, only some of the most common aspects of brigade formation and composition. The range of problems obviously is broader. But it is necessary to solve them without delay. As was noted at a plenum of the Leningrade CPSU Obkom, which discussed the problems of expediting scientific and technical progress in the light of CPSU Central Committee demands, "...The executives of scientific research institutes, design bureaus and enterprises cannot be permitted to take wait and see positions. It is necessary to study and creatively apply worthwhile experience at all times."

Let us stress again: The costs of giving up on the brigade method will, in the end, clearly outweigh those connected with its introduction. Even now, in analyzing available experience, it is possible to identify at least three kinds of effects from using brigade forms of labor organization. The first is a shortening of the science-to-production cycle; the second, improving of the quality of developments; and, finally, the releasing of personnel, which ensures the growth of specialists' average salaries from internal resources.

Taken together, all of this weighs quite a lot on the scales of scientific and technical progress. It even permits confirmation that, despite the specific difficulties connected with the organization of scientific brigades, and despite the fact that this collective form of labor organization still is in the first stage of its development in scientific research institutes and design bureaus, the future still belongs to the brigades.

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LABOR

LABOR OFFICIAL DISCUSSES NEW LABOR ORGANIZATION TRENDS

Moscow SOTSIALISTICHESKIY TRUD in Russian No 3, Mar 84 pp 20-25

[Article by B. Gavrilov, deputy chairman of the State Committee of the USSR for Labor and Social Problems: "New Trends"*]

[Text] Certain positive changes have recently become apparent in the national economy and have corroborated the validity and realistic nature of the party's objectives in the sphere of national economic development. "At the present time," the text of Yu. V. Andropov's address to the December (1983) party central committee plenum said, "the most important thing is not to lose our momentum and our overall positive attitude toward our work and to develop these positive processes more actively." This fully applies to the extremely important national economic objective of the extensive development of brigade forms of labor organization and incentives. It appears now that the first stage of this important work, distinguished by the rapid growth of the number of brigades in all sectors, has been virtually completed and that the second stage, entailing the qualitative improvement of the efficiency of primary labor collectives, has begun. In a recent decree on this matter, the CPSU Central Committee requested ministries, departments, union republic councils of ministers, association and enterprise administrators and party and trade-union organizations to investigate the introduction of the brigade form thoroughly and to take measures for its efficiently organized development and the augmentation of its productivity. This presupposes the ability to take note of new trends and to take them into account in the management of this process.

Today the brigade form of labor organization has become virtually the main one in industry. More than 60 percent of all workers belong to these primary labor collectives, and the number should reach around 68 percent in industry by the end of the five-year plan, including a rise of 70 percent in machine building. A characteristic feature of the present stage is that this form of labor organization is being used more widely not only by workers, but also by engineering and technical personnel directly engaged in the development of new equipment and technology. The design brigades at the Ulyanovo State Special Design Office of Heavy Milling Machines and several others are examples of this.

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* This article is based on a report presented at an all-union conference on the role of intraorganizational accounting and brigade forms of labor organization in the intensification of production (a report on the conference can be found on p 124 of this issue).

The main directions of the development of brigade forms are clearly stipulated in the CPSU Central Committee decree. Their purpose is the enhancement of production efficiency, presupposing concentration on the qualitative aspects of the matter and a comprehensive transition from the formation of isolated brigades to the establishment of the brigade form as an administrative subsystem. Experience has shown that the formation of a brigade does not produce any significant economic results and often does not even solve social problems effectively until the entire system has been reorganized. This primarily entails a planning procedure meeting the requirements of the brigade form. This kind of system has been organized well at the Kaluga Turbine Plant, the Production Association imeni Korolev and several other enterprises. The Ministry of Machine Building for Light and Food Industry and Household Appliances has drafted sectorial recommendations for the planning of brigade production assignments, and the Ministry of the Shipbuilding Industry has drafted sectorial procedures for the intraorganizational planning of production with the organization of brigades.

These examples, however, are still unique. In accordance with a decree of the USSR Council of Ministers and AUCCTU, all sectorial ministries are to take measures to reorganize the planning and accounting system in production associations and enterprises, perfect the organization of production and management and improve engineering, material and technical services for brigades. This will entail the planning of assortment and volume assignments for each brigade and the establishment of a single system of indicators for the shop, section and primary collective wherever possible. In other words, the existing system of planning for the primary link must be changed fundamentally because it generally does not carry the plan down to the level of the work position or coordinate the plans of the brigade, section and shop, as a result of which the majority of workers and brigades fulfill and overfulfill established norms and assignments while their sections and shops fail to reach planned levels. This will be a complicated job because, as studies by the Scientific Research Institute of Labor have shown, only 24-26 percent of all brigades have become the main object of planning even at the leading enterprises that have begun the consistent incorporation of the new progressive form of labor organization.

The past few years of the 11th Five-Year Plan have been marked by the speedy formation of new collectives. There has been an increase of 5.7 million in the number of workers in brigades in industry just during the past 3 years. In some cases, however, they were formed without sufficient preparation and have not augmented labor productivity substantially. At the same time, the most effective types of brigades, reflecting the distinctive features of production, and systems for their organization, planning and incentives are gradually being established in each sector. In the textile industry, for example, teams of weavers, headed by assistant foremen and paid totally in accordance with the final results of their work, have been formed. A distinctive feature of these brigades is the retention of the calculation of individual output, which plays the deciding role in the distribution of wages in accordance with the team labor coefficient. Comprehensive round-the-clock brigades (working two or three shifts) have turned out to be the most effective type in machine building and several other industries.

The study of past experience also revealed several common conditions governing the formation of highly effective primary collectives of the new type, differing from the earlier so-called technological brigades. Comprehensive brigades paid according to final results, working on a single job order and distributing wages in accordance with the team labor coefficient meet these requirements. They secure broad participation by the workers in production management through the brigade council. These collectives are responsible for the manufacture of either an entire item, as is done at the Yunost' Sewing Factory in Dmitrov, or a finished portion of the item (assembly brigades and others). Their creation can solve economic and social problems. On the one hand, labor productivity rises and output grows and, on the other, the work becomes more appealing, team members have more incentive to improve their skills, etc. The principles lying at the basis of the work of these collectives have been tested for several years and the present objective consists in disseminating this form everywhere without delay but also without excessive haste.

Sectorial research organizations still have a number of problems to solve. Above all, scientifically sound criteria must be determined for the formation of the new type of brigade for various forms of production. The optimal types of brigades must be determined, substantiated and tested experimentally at sectorial base enterprises.

The question of new professions for workers with broad specialties arises in connection with the trend toward the formation of primary labor collectives of the new type with the extensive combination of professions within them. In general, the purpose of this work is obvious. This kind of combination is now being conducted on the basis of specific technological features to secure the manufacture of a finished item, but the requirements for the training of these workers with a broad specialty have not been established as yet, and this training is not being offered. Various suggestions, sometimes completely contradictory, have been made, such as the substitution of machining experts for lathe hands, milling machine operators, etc. Obviously, the optimal criteria must be determined with a view to the future development of equipment and the brigade labor organization, the heightened appeal of work and the enhancement of worker skills. We must determine the content of the training of this new type of worker, and not only in terms of occupational features but also with a view to the requirements of our socialist society's present level of development. This work is now being conducted by the Scientific Research Institute of Labor. Obviously, institutes of the USSR Academy of Sciences could also be of great assistance. In particular, new requirements for workers of mass professions should be drawn up on the basis of the experience accumulated in machine building in conjunction with sectorial research institutes.

Another means of enhancing the impact of the brigade form will consist in the improvement of the long-existent so-called technological brigades--that is, those securing the completion of the technological process. These are generally small, highly specialized collectives. In 1982 more than 26 percent of the brigades in industry had less than five members. In these brigades it is virtually impossible to combine professions or form brigade councils. In recent years the brigade form has been developed through the unification of

workers who had previously worked individually; furthermore, this is how most of the brigades of the new type have been formed. Old collectives have remained relatively untouched by this process, but they no longer meet current requirements. The establishment of the new type of brigade on the basis of these will considerably enhance the effectiveness of this large group and turn these brigades into the genuine nucleus of the production collective. This process has already begun in many industries.

The further development of the brigade labor organization will presuppose the transfer of primary collectives to cost accounting, and this will require a great deal of preparatory work. The procedural basis for this exists: Intersectorial recommended procedures, and even sectorial ones in the case of some ministries, have been published. The widespread introduction of brigade cost accounting will necessitate, however, the establishment of the appropriate conditions directly at each enterprise. Above all, this will entail cost accounting indicators for the brigade. Furthermore, in addition to production volume and labor productivity, these indicators should also measure expenditures of crude resources and materials and establish the financial liability or financial incentives for the fulfillment or nonfulfillment of these indicators.

At this time, brigade cost accounting is most effective in combination with contracted principles of labor organization and incentives. The fact that this refers to the principles of the brigade contract must be underscored because this concept has regrettably been used incorrectly in the press, monographs and various informational materials which often call the conventional brigade of the new type a contracted brigade. The time has come for our scientists to collate and classify all of the terms that are being used. During this process it should be borne in mind that the brigade contract represents the highest level of development of the brigade labor organization and is now being used primarily in construction in its pure form (the Zlobino method).

Now the principal way of heightening the effectiveness of existing brigades will consist in technical and engineering support. The experience of the Kaluga Turbine Plant, Uralmash imeni S. Ordzhonikidze and many other plants proves that new brigades, even the well-organized ones, gradually select their own internal reserves over a period of 3-4 years by combining professions, stepping up the acquisition of professional skills by young workers, strengthening discipline, etc. The further augmentation of labor productivity in these brigades virtually depends on the organization of production in the section and shop, on the incorporation of mechanization and new equipment, on better planning and on the development of creative initiative. Wherever all of this was not taken into account, productivity growth rates gradually declined and there was a growing disparity between the considerably improved work of the brigade and the inferior organization of production and management in the shop or section.

The situation is different at the leading enterprises where this natural tendency was noticed in time and the proper conclusions were drawn. One example is the Pozitron Association in Leningrad, where the second stage of the improvement of collective forms of labor organization has begun. Precise order has

been established here not only within the brigade (which is something we have already learned to do), but also in sections, in shops and particularly in the places where individual production links, brigades, sections and shops must work together. The brigade plan is worked out in detail and reinforced by the incorporation of new equipment and the improvement of labor organization in general. New types of brigades are making their appearance, including some made up of auxiliary workers.

The widespread use of the brigade form has revealed a significant discrepancy between the initiative, responsibility and financial interest in final results of brigade members and engineering and technical personnel. Today it is clear that the further augmentation of the effectiveness of the brigade labor organization will be impeded without serious engineering support. For this reason, after studying the activities of associations and enterprises, the USSR Council of Ministers and AUCCTU acknowledged the need for improvement in the engineering services of primary labor collectives. Considerable experience in the resolution of this problem has been accumulated in the Uralmash Association and Novokramatorskiy Machine-Building Plant. It has been commended by the All-Union Council of Scientific and Technical Societies and was recently discussed and approved by USSR Goskomtrud [State Committee for Labor and Social Problems]. Practical steps will be taken for its broad dissemination.

What is the essence of this experience? During the year each member of the engineering and technical staff must plan technical and organizational measures to reduce the labor-intensiveness of the manufactured product by the annual output in norm-hours of a single worker--that is, effect the hypothetical release of one worker. It is important that the devices, perfected technological processes or organizational decisions proposed by the engineers be used in specific brigades and that their incorporation be envisaged in organizational and technical plans.

Similar work has begun at other enterprises. For example, a plan for engineering services for brigades is compiled annually at the Orekhov Cotton Combine. Each brigade is assigned a controller from the engineering and technical staff. They negotiate a labor cooperation agreement, stipulating mutual obligations and the specific problems requiring joint resolution. The plan is taken into account when bonuses are paid to engineering and technical personnel. Other examples of creative collaboration could also be cited. All of them testify that the organization and evaluation of the work of engineering and technical personnel must be adapted to the conditions of the brigade labor organization and that financial incentives for engineering and technical personnel must be coordinated more closely with the final results of brigade activity. Sectorial scientists should pay more attention to these matters. USSR Goskomtrud and the Scientific Research Institute of Labor have summarized this experience and are now drawing up intersectorial recommendations on this matter, which should serve as a basis for sectorial procedures.

The search for more effective ways of heightening the initiative and responsibility of engineering and technical personnel for the organization of labor in brigades is being conducted in several fields. In particular, the problem of the "foreman-brigade leader" is now being investigated thoroughly. In

principle, the correct organization of labor should preclude this problem. When brigades are formed, the foreman's administrative requirements should be changed and he should manage 2 or 3 brigades instead of 20 or 25 people. This opportunity arises when the brigade leader takes over part of these functions, and a decision has already been made on this matter.

At the same time, the development of the brigade labor organization has been accompanied by the formation of many large comprehensive brigades responsible for an entire cycle of operations. This process will apparently continue. The brigade leader of a large collective has to spend more time on organizational matters and less time on work in his specialty. For example, the brigade leader of a comprehensive brigade of 15-20 people already spends 1-1.5 hours a shift on the resolution of organizational problems. In most cases he does this in his free time. An increase in the number of brigade members naturally increases the volume of this work and, of course, it must then be done during work hours. There are now around 1.4 million brigade leaders in industry. This is why we feel that the majority of large brigades should be headed by foremen. Obviously, their wages will have to reflect this change. At the same time, the foreman should continue to represent the administration. USSR Goskomtrud and the AUCCTU are now drafting procedures for the payment of wages to foremen and other engineering and technical personnel belonging to brigades.

Experience has shown that the institution of the new office of foreman-brigade leader raises the qualifications of the foreman, who must have organizational and technical expertise and be able to perform the most complex operations of the brigade's leading occupation. This will considerably augment the authority and role of the foreman. The conditions for these changes matured gradually, as manufactured products became more complex, particularly in such industries as electronics and instrument building. Engineers belonging to production brigades are already making the final adjustments on the most complex items at many enterprises of the Ministry of the Radio Industry and the Ministry of the Electronics Industry.

A comprehensive brigade of engineering and technical personnel, repairmen and mechanics engaged in the maintenance and repair of equipment with digital programmed control has been formed in the chief mechanic's section of the Podol'skshveymash Production Association. It operates on the basis of a contract negotiated by the administration and the collective. There is no question that this experience is noteworthy and warrants investigation. The brigade wage fund consists of the wages and salaries of members, wage differentials for combined professions and broader service zones and bonuses for the ability to observe and surpass equipment operation norms. The differentials and bonuses are distributed in accordance with the team labor coefficient. The formation of this collective has raised the operability coefficient of equipment from 0.75 to 0.9.

This form of labor organization is still in its initial stages. It has its pros and cons. USSR Goskomtrud plans to work with sectorial ministries to test it at base enterprises, and after this the dissemination of this experience will be considered. Sectorial research organizations have an important role to play in this work.

The further development of the brigade labor organization will entail the extension of its characteristic features to larger structural subdivisions--sections and shops--and the principles of the contract will be used here as well. Self-funding subdivisions will be given volume and assortment assignments and long-term wage norms per unit of manufactured product. Equipment and tools will be assigned to these collectives; they will be made up of workers and engineering and technical personnel and will be headed by the manager of the section or shop. In our opinion, the establishment of a single wage norm will help to create a real collective of people with a common outlook and a common interest in the performance of common tasks by fewer people. The subdivisions will have their own wage and bonus funds, depending only on the results of labor, and the wages and bonuses of workers and of engineering and technical personnel will be distributed on the basis of the team labor coefficient. This will also apply to the wages saved as a result of the performance of jobs by fewer workers. The direct financial interest of engineering and technical personnel in the results of work by the entire collective will heighten the effectiveness of their activity. Some experience has already been accumulated in this field and it is producing promising results. A self-funding section was created, for example, at the Elektrosignal Plant in 1970. It now consists of 38 main members, 12 auxiliary workers and 4 engineers. Over a period of 12 years production output increased 5.6-fold and labor productivity rose 3.6-fold.

On the initiative of the Novosibirsk CPSU Obkom, USSR Goskomtrud and the Economics Institute of the Siberian Branch of the USSR Academy of Sciences are conducting an experiment with the introduction of this system at 13 enterprises in various industries. It will be organized in 42 sections and shops with 4,000 personnel. This could reveal great new potential for more effective work by brigades as a result of engineering innovations. Many social problems are also solved in this kind of collective, particularly the further eradication of differences between mental and physical types of labor. Other scientific establishments should also be involved in this experiment--for example, the Institute of Socioeconomic Problems of the USSR Academy of Sciences.

Several problems requiring investigation with a view to the future development of our society have already come to light. The directions and forms of the further improvement of the brigade organization must be studied and defined with a view to the introduction of new equipment, the widespread use of robots and the creation of flexible automated production units. An interdepartmental council, made up of representatives of the AUCCTU, ministries, departments, the USSR Academy of Sciences, the All-Union Znaniye Society, the All-Union Council of Scientific and Technical Societies and several other organizations and brigade leaders from various enterprises, has been set up by USSR Goskomtrud to perform these tasks and to coordinate the work of ministries in the development of brigade forms of labor organization. We believe that the work of this council will give new momentum to scientific research in the field of labor organization, the search for new and more effective forms of collective labor and the attainment of objectives stipulated in decrees of the CPSU Central Committee, USSR Council of Ministers and AUCCTU.

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BATALIN STATES VIEWS ON WORKPLACE CERTIFICATION

Moscow EKONOMICHESKAYA GAZETA in Russian No 10, Mar 84 p 8

[Article by Yu. P. Batalin, Chairman of the USSR Government Committee on Labor and Social Question: "Certification of Work Places"]

[Text] The basic directives for the development of our national economy are precisely defined by the party. This involves, first of all, intensification, rapid introduction of scientific achievements into production, technology, advanced experimentation and the implementation of large-scale complex programs. As the General Secretary of the CC CPSU, Comrade K. U. Chernenko, noted in his speech at the February (1984) Plenum of the CC CPSU, "All this, in the final analysis, must raise the productive strength of our society to a new qualitative level."

Complex Approach

The practical measures worked out by the party for the improvement of management and for plan and labor discipline have assisted in the increase of creative activity by the working masses and in the marked acceleration of the growth rates of national production. But there is still great non-utilization of possibilities and reserves. In particular, the national economy incurs large losses as a result of the disparity between the constantly increasing number of work places and available labor resources. The results of and examination conducted by the USSR Central Statistical Board of 240 enterprises of a group of industrial ministries indicated that the surplus of workplaces in the first shift alone was, on the average, about 10 percent.

A number of work trends have recently taken shape involving the improved use of the fund of labor resources.

In accordance with the resolutions of the 26th CPSU Congress, measures are being implemented to curtail the use of manual labor. Appropriate goals have been established for the industrial ministries and enterprises. In practically all the republics, in many oblasts and in individual ministries, programs have been developed to curtail the use of manual labor. This has yielded definite results. At the end of the last 5-year plan, for the first time there was success in stopping the absolute numerical growth of labor industries occupied with manual labor and during 3 years of the current 5-year plan, they have reduced by approximately 450,000 people. A survey (ceftification) is now being conducted of manual labor which will permit more effective work to be done in this area.

The realization of complex plans for the improvement of conditions, measures for protection of labor and sanitary and health measures permitted an improvement of working conditions for about 10 million people during 1981-1983.

But even with the improvement of working conditions and especially with the curtailment of manual labor, we have a right to expect considerably more. In industry alone, up until now about 9.5 million people are occupied in manual labor--more than 36 percent of the total number of workers.

One of the reasons for such a state of affairs is the non-complexity of the ongoing work and its lack of coordination with the fundamental production and social goals of associations and enterprises.

An analogous situation occurred in recent years with the introduction of measures involving the scientific organization of work. A unified methodological foundation is necessary for a complex, thorough evaluation of available productive potential and its primary basis--the workplace. Such a foundation is the system of certification of workplaces, which received a high evaluation at the December (1983) CC CPSU plenum.

By the workplace--this primary cell of national production--is understood an area of application of work determined on the basis of labor and other active norms, equipped with essential means intended for the work activity of one or several executors.

In the process of certification a determination is made of the level of machine-worker ratio, the qualitative level of the techniques and technology used by the workers and the organizational and social characteristics of the workplace.

Certification reveals the level of general educational and professional training of staff and their suitability for the requirements of the concrete production process.

An analysis is also made of the methods of work organization, qualitative characteristics of the production brigades, the forms of their participation in the production process and the systems of their interaction with other brigades and functional services.

The principal novelty of certification lies in the fact that the workplaces (and, in further divisions, the shops and enterprises as a whole) are evaluated in a complex manner according to technical and technological, economic-organizational and social factors. As a result, the possibility is established, on a unified methodological base, for a more purposeful and organically coordinated working out and realization of various measures to raise the effectiveness of production.

Among the concrete tasks that may be resolved by means of certification, the following should be noted first of all.

Certification permits the exposure of workplaces which do not conform to progressive technial and organizational resolutions and to normative requirements and standards. This, in turn, constitutes a basis for implementing

measures for the rationalization of such workplaces or the liquidation of those of them for which rationalization is inexpedient. In addition, the possibility is established for resolving such an important goal as the increase in work shifts for equipment, especially the most productive type.

The certification of workplaces has great significance for the formation of a complex program for the mechanization of manual labor, especially that of a heavy physical and unskilled kind, as well as for the improvement of its conditions. In addition, a foundation must be established for the application of various privilages and compensations for unfavorable working conditions.

What Accumulated Experience Means

In recent years, some labor collectives have developed their work according to certification and rationalization of workplaces. The enterprises of the Ministry of Tractor and Agricultural Machine Construction have accumulated considerable experience in this area. Having set about the certification of workplaces in 1979, the enterprises of this ministry have been able to achieve a reduction of more than 30,000 workplaces in the last 3 years.

The K. E. Voroshilov Dnepropetrovsk Combine Plant has achieved particularly great success in certification work and the rationalization of workplaces. Here, during 3 years of the current 5-year plan, 600 workplaces were liquidated which did not respond to modern requirements, including 125 with difficult and dangerous working conditions. In addition, the volume of production and labor productivity grew by 28 percent, the cost of production was reduced by 8 percent and the capital-output ratio increased by 12 percent.

In the Ministry of Automobile Industry, work to improve the reduction of workplaces has been implemented since 1980. A thorough evaluation has been carried out for 45 percent of workplaces in the sectors, 38 percent of which have been certified.

In the "Zil" production association, as a result of certification, the work requirements were reduced for 511 people and an annual savings of 1.6 million rubles was made in the wage fund.

Work on workplace certification was developed in the enterprises of Leningrad and in a group of enterprises of Minlegpishchemash.

Experience has shown that certification of workplaces has permitted an increase in the effectiveness of production due to a redistribution of the production program and corresponding physical and labor resources from obsolete and unprofitable areas and products to highly efficient capacities being utilized at the present time without a full load in a number of cases. Practical conditions are also established for the removal form service in the plan of obsolete production, the reconstruction of which has been declared inexpedient.

The certification of workplaces may become an effective instrument for increasing quotas and better determining means of utilizing capital investments which lead to technical re-equipment and reconstruction of active production.

On this basis, the coordination of reproduction of basic funds and the formation of the number of workplaces with labor resources should be improved.

Up to the present time, certification has been carried out, on the whole, at the initiative of the enterprise. The time has now come for a change to a new qualitative stage--the introduction of certification of workplaces as a compulsory measure in its centralized coordination.

New Tasks

It is expedient, in 1984-1985, to conduct an accounting of existing workplaces in industry and their certification so that at the beginning of the 12th 5-year plan there will be a thorough and objective evaluation of our production potential. This will assist in the selection of concrete ways and means of realizing the reserves in the growth of labor productivity and the increase in production efficiency.

Questions regarding the organization of work in the certification of workplaces were discussed at the All-Union seminar-conference in Dnepropetrovsk. In the recommendations of the seminar, provision was made for the establishment of a permanently acting commission of sector certification for the preparation of sector directive documents to regulate the order of all preparatory and organizational work, including plans to carry out certification in subordinate enterprises. It was recommended to establish analogous commissions in every enterprise and to charge them with implementing certification and rationalization of workplaces in close connection with the aims and tasks of the enterprise.

The All-Union Methodological Center for Labor Organization and Production Direction of Goskomtrud USSR has now worked out a project for "Temporary methodological recommendations on the certification of workplaces in industry." In turn, it is imperative for the ministries to provide for the timely and qualitative preparation and treatment of sectorial methodlogical materials and to determine the head organizations which would implement this work.

Goskomtrud USSR, together with other departments, is taking measures for the activization of the working out and renewal of inter-sectorial model decisions, regulations and requirements for the scientific organization of labor, norms and standards required for the certification of workplaces. The ministries must implement corresponding work for the sectors.

One of the most important questions that must be resolved in the aims of the establishment of a state system of certification of workplaces is the ensuring of reliability in the functioning and objectivity of this system. The certification of workplaces can yield its greatest effect when it is converted into a permanent function of management.

In these aims, as has been demonstrated by the experience of progressive groups, measures for the certification and rationalization of work places must be included in the technical, industrial and financial plan of the enterprise and the collective contract. The certification of workplaces is thus placed on a plan basis. The labor collectives and their primary links--the production brigades and all the workers are enlisted in its implementation.

It was noted in the recommendations of the seminar that it is imperative for questions of the rationalization of workplaces to be systematically examined at meetings of labor collectives, at production and trade union conferences in shops, in divisions and in brigades. In the experience of a number of enterprises, it is expedient to provide for a system of material and moral incentives for active work and high results in the certification and rationalization of workplaces.

The conducting of certification and rationalization of workplaces also depends significantly on the quality of engineering safeguards.

In the Uralmash and Novokramatorskii plant production associations, a competition was organized among the engineering and technical workers to reduce the labor intensiveness of production on the basis of the introduction of a complex of technical measures and individual creative plans.

An important role in the work of workplace certification may be played not only by the industrial ministries, but also by the regional organs of management.

The certification of workplaces in enterprises of the corresponding rayon will permit work to be carried out on a better foundation for the formation of numerical limits on personnel, will improve control over the utilization of manpower and will give the possibility to determine workplaces where labor of pensioners can be utilized.

At the present time, Goskomtrud USSR, together with the Council of Ministers of the RSFSR and the All-Union Central Trade Union Council, are preparing to introduce in a number of oblasts of the Russian Federation systems of management of labor resources under the direction of local soviets of people's deputies on the basis of the certification and rationalization of workplaces. It is planned to introduce this system in Belorussia, the Baltic states and the Dnepropetrovsk oblast as well.

Of course, parallel with an examination of the planning and organizational measures, it is imperative to closely coordinate work on certification with the whole system of the economic mechanism. This, in our opinion, may be ensured on the basis of the application of long-term economic norms.

The combination of sectoral and regional approaches to the certification of workplaces and the coordination of this work with the whole system of the economic mechanism will permit it to ensure high reliability and effectiveness.

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PARTY SECRETARY DEFENDS SHCHEKINO METHOD

Moscow SOTSIALISTICHESKIY TRUD in Russian No 4, Apr 84 pp 7-13

/Article by I. Yunak, member of the CPSU Central Committee, first secretary of the Tula Oblast CPSU Committee: "Shchekino Method Stimulates Efficient Utilization of Personnel"/

/Text/ The organization and stimulation of labor by the method of the collective of the Shchekino Chemical Combine (now the Azot Production Association imeni 50-Letiya SSSR) in Tula Oblast is one of the methods of increasing production efficiency, labor productivity and output with a simultaneous decrease in the size of personnel. About 1,900 people have been released in the association itself since the beginning of the experiment. At the same time, the volume of production rose 3.1-fold, labor productivity increased 4.1-fold and profitability quadrupled.

A great deal is said and written about the Shchekino method. Its economic mechanism has been exposed in hundreds of articles and many books and pamphlets. True, often the problem is simplified maximally and only workers' material interest is mentioned as its main driving belt. To be sure, an additional wage increase is assumed for holding two jobs and expanding the service zone. This is a serious lever, which helps to raise labor productivity and, on the whole, attain high end results.

In our opinion, which is based on a prolonged observation of the work of the collective of Shchekino chemists and other enterprises adopting the Shchekino method, workers' material interest, figuratively speaking, is only the upper, visible layer of the new form of labor organization. If the matter is reduced to material interest alone, it is possible not to see the crux of the matter. The Shchekino method is a new level of management. It uncovers the best qualities of the working class, cultivates a sense of enterprise ownership and develops collectivist consciousness.

It is very difficult to express all this in some indicators. Nevertheless, it can be stated with all definiteness that in the collectives that have changed over to work by the Shchekino method there is no labor turnover, a spirit of solidarity, friendship, mutual assistance and creativity reigns and labor discipline is higher. For example, whereas work time losses at the oblast's enterprises average 0.41 percent of the worked time, at the Azot Production Association, only 0.06 percent. Since 1967 work time losses due to unauthorized absences from work have been reduced there by a factor of over 15 and due to leaves with the administration's permission, of almost 30.

The following fact is remarkable. At one time, when it seemed that the new form of labor organization, getting out of the experimental stage, will receive a broad "green light," doubts as to the advisability of the conducted experiment began to be expressed unexpectedly. As a matter of fact, the following question arose: Should the Shchekino method exist or not? Everything depended on the position that the collective adopted. Shchekino chemists assumed full responsibility for the cause fostered by them. To give it up meant for them to give up creativity and the possibility of participating in production management and of seeing and considering themselves enterprise owners.

Civic maturity and concern for the preservation of the exceptionally important undertaking for our society at large helped Shchekino chemists to make the correct choice. The collective not only did not let the initiative die down, but also significantly enriched its content and found uncovered potentials. The enterprise, which by that time had released significant production personnel, annually increased output, not using a single additional pair of hands.

It must, however, be noted that the Shchekino method in itself is only an economic tool. Where, after the transition to the organization and stimulation of labor according to the experiment of Shchekino chemists is announced, the matter is considered finished, it should be known that it is only beginning. The vast potential force of their method is not uncovered automatically and does not operate in itself, but under the conditions (and this should be singled out especially) of a high intensity of organizational, party-political, ideological and educational work, continuous improvement in the economic mechanism and acceleration of the rates of technical progress.

The decree dated 9 October 1969 of the Central Committee of the Party, which generalizes in detail the practical experience of the work of the party committee of the Shchekino Chemical Combine on the mobilization of the collective of workers for an increase in production volumes through labor productivity growth, draws attention to the above. This document has become the battle program for the entire Tula Oblast party organization for the dissemination of the experience of Shchekino chemists. It is a guideline in our work even today, because it has not lost its topicality.

At first individual and then dozens of the oblast's enterprises followed the example of the workers of the Shchekino combine. The new procedure of its application approved by the USSR State Committee for Labor and Social Problems, the USSR Gosplan, the USSR Ministry of Finance and the AUCCTU in April 1978 provided tremendous help in the popularization of their initiative. At present 226 enterprises and organizations in the oblast work by the method of the Shchekino Azot Production Association. They turn out more than 76 percent of the total industrial output. During 1970-1983 more than 40,000 people were released, the wage fund was saved in the amount of 43 million rubles, the volume of industrial production increased 1.8-fold and the entire increase was obtained as a result of labor productivity growth.

The transfer of the entire national economy to the rails of intensive development is the immediate and urgent task of today. The specific ways and methods of accomplishing it are efficiently and clearly determined in the materials of the November (1982) and June and December (1983) plenums of the CPSU

Central Committee and other party and government documents. Trying to grasp the meaning of the lines of the materials of the past plenums of the CPSU Central Committee and interpreting the outlined goals, one inevitably arrives at the conclusion that the Shchekino method can and should play an even greater role, because it fully meets the spirit and meaning of the policy adopted by the party in economic development and in the development of all our society. Moreover, for Tula Oblast the form of labor organization on the basis of the principles of Shchekino chemists is vitally necessary. This is due to the complex demographic situation. For example, a decrease in the population has occurred in our oblast only recently. Nor should the change in its age structure be disregarded. There is an especially unfavorable situation in rural areas. Whereas in 1965 the proportion of the rural population comprised 34 percent, in 1982, about 20 percent. As a result, the total shortage of manpower has increased sharply and at present the national economy is provided with labor resources at the rate of only 95.6 percent.

Of course, no one intends to fit the assignments for output to the present balance of labor resources. Conversely, the task is to ensure a significant increase in production volumes with existing forces. The fundamental discussion at the plenum of the oblast party committee held in October 1982 concerned the above. The plenum approved an overall program for the strictest economy and an efficient utilization of labor resources at all production and management sections. The further development of the Shchekino initiative is among its main directions. A specific task, that is, to complete the transfer of all the oblast's enterprises and organizations to work by the method of Shchekino chemists, was set.

Before adopting such a decision, we clarified the following to ourselves: The Shchekino method of work can be utilized in almost any national economic sector, not only in the chemical industry. This fundamental conclusion was drawn on the basis of the practice in its application at some enterprises in machine building, metallurgy, construction and the service sphere and on some sovkhozes and kolkhozes. Now it is important to ensure the planned and systematic fulfillment of the outlined tasks. Success will depend primarily on the level of organizational, mass-political and educational work in labor collectives. Therefore, it is necessary to help enterprise managers and specialists to master the practice of introduction of the Shchekino method and to creatively interpret its principles.

One of the meetings in the oblast party committee last January, where the fulfillment of the schedule for the transfer of enterprises to the new labor organization was examined with the participation of economic managers and specialists, is recalled. The conversation turned to the reasons preventing this. R. F. Kotel'nikov, chief engineer at the Uzlovaya Sewing Factory, was asked to express his opinion of this problem. He was asked not by accident. This is a young enterprise and its collective is friendly, young, trained and receptive to everything that is new and advanced. The workers of the Uzlovaya Sewing Factory widely utilize the experience of their colleagues from Tiraspol, Leningrad and Kaluga and many other innovative ideas. It would seem that such a collective will have no obstacles in the mastering of the Shchekino method. However, as it became clear from the speech by the chief engineer, the problem of the experiment of Shchekino chemists was raised by no one and nowhere. It was considered an axiom that it was impossible to apply it at the sewing factory--not any production would fit it.

Unfortunately, this is not yet a sufficiently widespread view of the principles of organization of labor of Shchekino chemists. Of course, life forces us to turn to their experiment. However, introducing it, some economic managers and specialists still look back quite often, trying to leave the established procedure in the organization of their production inviolable. However, the crux of the matter lies not in "fitting" the Shchekino method to existing forms of labor organization, but in fundamentally reconstructing the entire production mechanism on its basis. The attitude toward the Shchekino method at the sewing factory was similar, although slightly different. Not noting this themselves, sewing factory workers went toward it--it remained only to make a decisive effort. However, it did not follow. The same "axiom," more accurately, thinking inertia, was a hindrance.

At that time at a meeting in the oblast party committee we did not try to exert pressure on those that also stood "at the threshold" of the Shchekino experiment. We wanted the people, by following the logic of the search for the best forms of work organization, themselves, according to their inner convictions, to cross it. A frank and direct talk helped this a great deal. In a short time the Uzlovaya Sewing Factory, like a number of other enterprises, changed over to work according to the Shchekino method. Are there now specific results? There are and not bad ones. More than 100 people mastered second occupations and 320 improved their skills. Realizing the overall plan for an increase in labor productivity, workers at the Uzlovaya Sewing Factory were able to release 16 people. On the whole, the factory's planned capacity was mastered with personnel numbering 400 people less than estimated.

Although now it is clear that the Shchekino method can be applied everywhere, it is not yet introduced as quickly as one would want, especially in sectors where piece-rate wages predominate. Managers and specialists of such enterprises quite often attribute this to production characteristics. In their opinion, the Shchekino method changes little in the existing material incentive system. A piece-rate worker, even without this, if he wants, will be able to earn as much as he needs. Well, in order not to lag behind the spirit of the times, the elements of the Shchekino method, not the method itself, are introduced and not in basic production. At such enterprises mainly service personnel work according to the new method. It is clear that the truncated form of the Shchekino method cannot have a significant effect on the course of work. However, they do not resolve to go further, attributing their sluggishness to the same specific nature of production.

Of course, even at allied enterprises it is not always possible to copy in all details the forms and means applied by the chemists of the Azot association. However, the characteristic of the Shchekino variant of labor organization lies precisely in the fact that it makes it possible to transform itself, not changing the main principles. Today this characteristic becomes clear and many enterprises, creatively approaching the experience of the Azot association, also find the keys to their "specific nature."

For example, the Tula Machine Building Plant imeni Ryabikov was one of the first to follow the example of the chemists from Shchekino. The main questions, which could not be resolved for a long time, were as follows: What is to be done with the piece-rate worker? How to coordinate his personal aspirations with the concerns with which the entire collective lives? In short,

there was a need for a material incentive mechanism that would include him in the general active search for production potentials. Such a mechanism was found. Whereas in the chemical industry the incentive fund for holding two jobs and expanding the service zone was formed from the direct saving of the wage fund, at the machine building plant the competition was for the saving and reduction of the standard of wages per ruble of sold output. The piece-rate worker understood the chief thing: His material well-being most directly depended on the level of his skills, on the possibility of holding two jobs, on the order that existed at the section where he worked, on whether the technological process was improved or not and on the price at which the end result was attained. The psychology of the piece-rate worker was reoriented in such a way. Therefore, it was not by accident that the number of those wishing to study in courses for improvement in skills rose and the demand for machine tools with numerical program control and automated lines increased at the plant. Interest in problems of technical progress began to be aroused at work places.

Those directly engaged in production management also had to change their method of work. A point system was introduced for an evaluation of the quality of managerial labor of engineering and technical personnel. Although in itself such an evaluation was not news, in this case it made it possible to bring the interests of managerial personnel and executors closer together, as a result of which it was possible to significantly increase production volumes with a simultaneous release of more than 2,000 people. Of course, not everything is smooth at this enterprise. However, the fact that people do not stand still here, but seek, make mistakes, find and step by step rise to a new level of management is reassuring.

The Shchekino method born by life itself develops along with it and is enriched by it. In connection with this we would like to discuss the Kosaya Gora Metallurgical Plant imeni F. E. Dzerzhinskiy. Creating the basis for the new form of labor organization, workers actively engaged there in the technical retooling of the enterprise, automation and mechanization of production processes and improvement in management. As a result, more than 1,500 people were released. Some of them were assigned to new production facilities and an internal construction subdivision was formed from others. Not enlisting state contracting organizations, the plant collective energetically undertook the solution of social problems. During the last decade workers at the Kosaya Gora Metallurgical Plant with their own forces built 40,000 square meters of housing, preventive clinics, a sports complex, a restaurant and children's preschool institutions. Plant workers give considerable assistance to the kolkhozes and sovkhozes under their patronage. They build housing and production premises and assign people for field work.

With regard to basic production it develops dynamically, constantly increasing the rates of output of cast iron, cement and other products. Production assignments are fulfilled systematically with a good reserve. Creatively interpreting the practical experience of Shchekino chemists, Kosaya Gora Metallurgists greatly expanded its zone of operation and coordinated their principles with the set of problems solved by the collective. All this had a significant effect on people, raised the level of their economic thinking, unfettered their initiative and thus increased the collective's labor potential

many times. That is why we call the Shchekino method a school of management. Its introduction demands from party committees, Soviet, trade union and Komsomol organs and economic personnel a higher level of management and forces people to search for and find potentials, raise discipline and improve the method of work.

The history of the Shchekino method extends over more than two decades. It has long been recognized that this form of labor organization is the most powerful lever of intensification of our economy. Nevertheless, disputes concerning it do not cease to this day. True, it is no longer said that it is outdated. However, some managers and specialists still assign a seemingly auxiliary role to it, something like a tool for optimizing the size of production personnel. In their opinion, accelerated rates of technical progress and the further improvement in the economic mechanism will do all the rest.

What should the answer to this be? In our opinion, the essence of the Shchekino experiment, that is, the problem of increase in labor productivity and of the main productive force--man--is overlooked here. But it is precisely the latter that solves the problem of acceleration of the rates of technical progress and improvement in the economic mechanism depends on him and on him alone. Production based on the Shchekino method makes it possible to flexibly and firmly coordinate in practice the worker's personal interests with the interests of the collective and society at large. This helps man to more clearly realize his role and place in the general system and to more fully uncover his potentialities, which means, to more rapidly accomplish the tasks set for him.

However, it would be incorrect to think that problems connected with the introduction of this experiment no longer exist. They exist, stemming primarily from the situation formed in the economy. Problems of production intensification through labor productivity growth on the basis of a decrease in the size of production personnel were solved at the first stage of its utilization. Today such potentials with due regard for the acuteness of the demographic situation are exhausted. Therefore, proceeding from the content and aim of this method, it is necessary to change the approaches to it and to place it on another basis. Under these conditions, as V. I. Lenin wrote, it is exceptionally important "... not to be satisfied with the ability developed in us by our previous experience, but to infallibly go further, to infallibly strive for more and to infallibly change over from easier to more difficult tasks."

There are no ready formulas for the further development of the Shchekino initiative. Life itself suggests how one should act.

The same machine building plant, having completed the first stage of work by the Shchekino method, determined the main line for the future--development of collective forms of organization and remuneration of labor according to the end result. Conversely, at the Tula Oktava Plant the preparation for the introduction of the Shchekino experiment on an enterprise scale was begun with the organization of new types of brigades in order to develop the Shchekino method of work from bottom, not top. This resulted in a highly appreciable gain. A characteristic detail: Before the adoption of this method (1978) a big shortage of manpower was experienced there (which, as was affirmed at the plant then, greatly hampered production growth and served as a reason for

frequent disruptions in the fulfillment of planned assignments). However, utilizing the Shchekino method and within its framework collective forms of labor organization, the enterprise was not only able to manage with existing forces, but also released another 826 people.

To be sure, brigades of the new type, which are based on cost accounting relationships, in themselves are a vast moving force of our economy. The oblast party committee pays the most serious attention to the development of collective forms of labor organization. More than 55 percent of the workers now work in brigades. However, this is insufficient. Therefore, party committees, Soviet and trade union organs and economic managers face the task of activating work in this direction.

However, if we ponder over this, the establishment of brigades of the new type, essentially, is the introduction of the principles of the Shchekino method on the widest scale. With the help of brigades its ideas penetrate into and are affirmed even at the national economic sections where their utilization previously seemed inconceivable. This is especially important, because an exceptionally favorable situation is created for the further improvement in existing forms of production management and of our entire economic mechanism. Today we also try to interpret the Shchekino method from this point of view. The so-called overall system of management of the quality of work and of the economic and social development of the collective has now been developed and is applied at a number of the oblast's enterprises. Goal-oriented program planning is its main tool. It ensures a dynamic, balanced and interconnected development of all links, sections and subdivisions of enterprises both from the technical-economic and social points of view. The distinctiveness of this system lies in the fact that by means of enterprise standards it strictly outlines the range of duties of every member of the collective--from the director to ordinary worker--including social security services, which makes it possible to control the utilization of various goal-oriented programs and to most objectively determine and evaluate the contribution of every worker, employee, specialist and manager to the accomplishment of the tasks set. Without investigating the technical aspect of the problem, the main point can be stated--work organized in such a way contributes to maximum rationalization in the attainment of the outlined goals.

Sometimes one hears that people in Tula Oblast reject the Shchekino method and give preference to the overall system. This is fundamentally incorrect. In fact, the overall system in its form does not resemble the Shchekino method, but in its essence and meaning fully expresses the spirit of its principles embodied on a slightly different organizational basis. The introduction of the overall system has enabled us to see new aspects and possibilities in the Shchekino method itself. The oblast party committee closely follows the development of initiative and helps to affirm it in every possible way, because, in the final analysis, it gives good results. Enterprises most fully utilizing its possibilities ensure a significant labor productivity growth and an improvement in the quality of output.

The practice of introduction of the Shchekino experiment shows that it most fully uncovers its potentials when it is introduced, for example, on the scale of the national economy of an entire region. With such an approach it becomes

possible to take into consideration the characteristics of the economic structure and to attain an optimum balance of labor resources and their rational utilization. Such an experiment is now conducted in Shchekinskiy Rayon. What are its results? Under the conditions of manpower shortage, which was revealed in an especially acute manner during the years of the 11th Five-Year Plan, the rayon's economy nevertheless develops progressively in accordance with control figures. An increase in production volumes is attained as a result of labor productivity growth. Not only not enlisting additional manpower, but reducing it where this is possible (more than 6,000 production personnel members have been released since the beginning of the experiment), the rayon pursues the policy of successfully fulfilling the 5-year control assignment as a whole. There is a certain reserve for this. Output worth 24 million rubles in excess of the plan was produced during the past years of the five-year plan.

Naturally, by means not everything has been done in the reorganization of the oblast economy on the basis of the principles of the Shchekino method of labor organization and its stimulation. This is connected primarily with the formed stereotype of economic thinking of some economic managers and specialists, who under different pretexts as yet do not want to change the method of their work. Of course, our party organs, which in a number of cases have been unable to reconstruct organizational, mass-political and educational activity in accordance with the requirements of the CPSU Central Committee, are also to blame for this.

We know these problems and do our utmost to solve them with our own forces and during the shortest periods. The atmosphere of creativity, high responsibility, discipline, order and smartness now created by our party has the most favorable effect on all matters, including the oblast's national economic development. If industrial sectors are discussed, the policy of not only successfully fulfilling the program of the current year and of the five-year plan as a whole, but also of making up for the lag tolerated during previous years, is pursued here. A marked turning point is also visible in agriculture. Workers of the agroindustrial complex steadily increase their output. For example, for the second year in succession the oblast's farmers have successfully fulfilled the grain procurement plan. In addition to the assignment, more than 40,000 tons of grain were stored in the homeland's bins in 1983. The plans for the procurement of sugar beets, potatoes, fruits and vegetables were overfulfilled.

With regard to the animal husbandry sector of the rural economy, positive changes are also noticeable here. The production of meat, milk, eggs and wool is growing. We are firmly confident that the assignment for the production and purchase of food products and raw materials for industry will also be successfully fulfilled at the concluding stage of the five-year plan.

Improvement in the economic mechanism on the basis of introduction of the principles of the Shchekino method occupies an important place among the fundamental measures taken by the oblast's party organization for the intensification of party influence on the course of development of the national economic complex. Suffice it to say that since 1982 alone the number of enterprises, organizations, kolkhozes and sovkhozes working by the Shchekino method,

as compared with the previous six years, increased by two-thirds. During that time more than 20,000 workers were released. New production facilities were staffed with these workers and sections, where the most acute need for personnel was felt, were additionally staffed with them.

However, we do not flatter ourselves with these positive tendencies in the oblast's economy and are well aware that the turning point visible in its development is only the beginning. There is a need for even more energetic work in order to definitively transfer the national economy to the intensive path of development. As before, the accomplishment of this task is connected with the further popularization of the Shchekino initiative and with the reorganization of the entire economy on the basis of its principles.

Unfortunately, problems, whose solution exceeds the limits of the oblast's competence, arise in the further development of the Shchekino method. They are connected primarily with the position of a number of ministries and departments, which, proceeding from departmental interests, unexpectedly cut off the material incentive mechanism, hoping that, in practice, it will be maintained with enthusiasm alone. The Central Committee of the Party makes the requirement to further develop society's productive forces. "With regard to the basic directions in our economic development," K. U. Chernenko, general secretary of the CPSU Central Committee, indicates, "they have been clearly defined by the party. Intensification, an accelerated introduction of the achievements of science and technology into production and implementation of major overall programs--in the final analysis, all this should raise the productive forces of our society to a qualitatively new level." Today we must proceed from this, solving the specific problems in the construction of our economy--the economy of developed socialism.

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IMPACT OF TECHNOLOGY ON LABOR REQUIREMENTS ASSESSED

Moscow SOTSIALISTICHESKIY TRUD in Russian No 4, Apr 84 pp 33-37

[Article by V. Chevachin, chairman of LaSSR State Committee for Labor, under rubric "Let's Make More Complete Use of the Capabilities of Mechanization and Automation": "Technical Progress and the Freeing of Personnel"]

[Text] The thrifty, economical use of labor resources is currently of vital importance to our republic.

How do we imagine the paths for increasing the volume of production with the least expenditures of labor? First of all, it is the improvement of the system of administering scientific-technical progress; the planning of its development with a precise consideration of the needs for the industrial production in the region; and the acceleration of the rates of mechanization and automation of the production processes.

For this purpose the scientific-research and planning and designing organizations (NII i PKO) in our republic are being converted to cost-accounting methods of working on the basis of production orders (contracts). The attention of researchers and construction planners is concentrated on the development of technology that is up to the standards of the best domestic and worldwide models, and the attention of the workers at enterprises, to the most rapid introduction of that technology, and the carrying out of complete mechanization and automation of production, where automatic manipulators (industrial robots) are beginning to play a larger and larger role.

In order to accelerate the process of introducing robots, in 1981 the Central Technological Design Bureau, with experimental production entity (Robot-Technology Center), was created under the Institute of Physics, LaSSR Academy of Sciences, and the construction of an industrial robots plant was begun. The center was given the responsibility of coordinating the work of designing and manufacturing industrial robots and components.

During the two years of the center's existence, the following have been introduced into industrial production: 96 automatic manipulators with programmed control, 30 balanced manipulators, and 161 units for galvanic coatings. The largest number of these progressive devices have been installed at the VEF imeni V. I. Lenin and Radiotekhnika Production Associations, the Al'fa PTO [Production and

Technical Association], and at the Riga Railroad-Car-Building Plant, Avtoelektropribor Plant, and the Sarkana Zvaygzne Motor Vehicles Plant. Robot-technology complexes for metal stamping are functioning successfully at the VEF and Radiotekhnika Production Associations, at the Riga Railroad-Car-Building Plant, etc.

During the 11th Five-Year Plan our republic is supposed to introduce approximately 600 different types (models) of manipulators. Taking into consideration the fact that one manipulator replaces the labor of two to four persons (and in individual instances even more), by the end of the five-year plan it is planned to free 2000 workers and to assign them to other sectors.

In order to guarantee the effective use of robot-technology devices in production, Riga Polytechnical Institute has created permanent specialist refresher courses. In the vocational and technical training system, the training of adjusters and operators has been organized.

However, in the introduction of robot technology, as in any other complicated matter, specific difficulties and problems exist, namely: the list of the industrial robots being used in the republic is currently unjustifiably large and one does not yet see any attempt to reduce it. At a number of enterprises they are being built in directly into the existing technological scheme without any changes in the production process. One still observes a low level of unification of the means being used, or the providing of them with technical equipment. At the present time each plant worries about its own needs and orders those devices that are suitable only for itself. And the Robot-Technology Center, proceeding from the principles of economic contracts, is still working on the creation of RTK [robot-technology complexes] for the individual enterprise. In our view, this is inefficient. It would be desirable to achieve that situation in which multipurpose robot-technology means and unified devices could be used, with minimal modification, at all enterprises where technological operations that are similar in structure exist. That would make it possible to accelerate the introduction of new devices and would contribute to the better use of the personnel in industrial production and to eliminate the dispersal of the efforts of the specialists employed in developing automatic devices at the enterprises themselves.

I would especially like to discuss planning and designing organizations. There are approximately 220 of them in our republic. Unfortunately, many of them have been isolated from the enterprises, and some of them have been developing small-scale topics and have a large volume of uncompleted work. As a result the quality of the new articles is frequently low. Nor is everything favorable with the introduction of new developments. Apparently the time has come for the collectives at the scientific-research institutes and planning and designing organizations, and their subdivisions and individual executors, to introduce the evaluation of the quality of the labor and to tie that evaluation in with the providing of material incentives. And this kind of experience already exists in the country.

Something else that requires improvement is the system of determining the economic benefit. This is important in many regards. The use of progressive technology and technological schemes must be channeled into the reduction of labor expenditures and the reduction of production costs. And this must also be promoted by the providing of material incentives for the introduction and assimilation of the new technology.

In increasing the productivity and economical use of live labor, and in the freeing of workers' hands, an important role is played by the comprehensive target programs, which are viewed as a component part of the long-range state plans for the economic and social development of our society. At the present time LaSSR is carrying out 12 such programs. For example, the program entitled "The reduction of the application of manual and heavy physical labor in industry, transportation, and other branches of the national economy of LaSSR" is being executed by 14 ministries and 67 enterprises of union subordination. It plans for the removal, by the end of 1985, of more than half the workers, including all women, from work sectors with heavy physical labor. The republic's ministries and departments and the enterprises of union subordination have done a large amount of work to carry out the measures stipulated in this program.

In 1982 the planned indicators for the comprehensive program were fulfilled by 11 ministries and departments and 9 associations and enterprises. During the first two years of the 11th Five-Year Plan, 15,400 persons had been released from sectors with manual labor, as compared with the planned figure of 10,500, and 5200 persons from sectors with heavy physical labor, as compared with the planned figure of 3800. The economic benefit from the introduction of the measures in the comprehensive program came to more than 1.5 million rubles. For the republic as a whole, the reduction in the number of workers in hoisting-and-transporting and warehouse operations was 2400, or 63.5 percent of the number planned. There was a reduction by 49,700 persons, or 37 percent, in the number of persons employed under unfavorable working conditions.

The measures to automate and mechanize the production processes have been yielding positive results. They are being carried out at accelerated rates at the VEF and Al'fa Production Associations, the Biokhimreaktiv NPO [scientific-production association], the Liyepaya Haberdashery Combine, etc.

Much has been done in our republic to mechanize agriculture. There has been a constant increase in the rate with which it is provided with power equipment. Today that rate constitutes 42.4 horsepower per worker, as compared with 15.6 horsepower in 1970. This increase in the rate of provision with power equipment is one of the reasons for the fundamental changes in the content of agricultural work. According to data provided by LaSSR TsSU [Central Statistics Administration], at the current time we have completely mechanized the basic field operations -- plowing, sowing of grain crops, sugar beets, the harvesting of grain and silage crops, mowing, etc. Something that is close to completion is the mechanizing of potato-harvesting. Considerable results have been achieved in mechanizing the labor-intensive and not very attractive operations in animal husbandry. In 1982 the milking of cows was 99 percent mechanized; and the bringing of water to the animals on animal farms and in complexes was 88 percent mechanized. The share of completely mechanized animal farms and complexes for the maintenance of cattle came to 29 percent; hogs, 70 percent; and poultry, 74 percent.

In the republic's agriculture as a whole during the elapsed years of the 11th Five Year plan we have mechanized the labor of approximately 4000 workers on sovkhozes and kolkhozes and freed from heavy physical labor 2000 persons, including more than a thousand women.

The high level of mechanization of the production processes at animal-husbandry complexes contributes to the more precise division of labor, to the introduction of two-shift operations, and to the increase in the prestige attached to the occupation of animal raiser and milkmaid. As has been shown by analysis, concern for improving the working and everyday living conditions, the building of housing, and the development of the services sphere in rural areas promote the reduction in the outflow of personnel and to the permanent assignment of young people in agricultural production. At the same time, on those kolkhozes and sovkhozes where the predominant animal farms are small-scale commercial ones with a low level of mechanization in the operations of distributing the fodders, removing the manure from the buildings, etc., one senses a shortage of milkmaids, women responsible for tending the calves, hogs, and poultry, or workers in other occupations. In 1982, for example, there was a shortage of more than 3000 workers in animal husbandry, and the degree to which they were provided to the republic's kolkhozes and sovkhozes was only 91.7 percent.

LaSSR State Committee for Labor and Ministry of Agriculture, and the local party and Soviet agencies are striving persistently for the further acceleration of the mechanization of production processes in animal husbandry, and that will undoubtedly contribute to the permanent assignment of the workers in this basic sphere of agricultural production in our republic.

Although the scope of the work of mechanizing the production processes in industry, agriculture, and construction are considerable, there is no justification for reducing the efforts expended in this regard. The technical re-equipping of the enterprises in the food and local industry and of the Ministry of the Building-Materials Industry is proceeding at a slower rate than is needed. At many plants and factories, the mechanization of the subsidiary production is being carried out at insufficient rates. Sometimes the robot-technology complexes are already in operation in the basic shops, but the parts and blanks are being loaded manually at the warehouses.

These and other shortcomings attest to the underestimation by the enterprise managers of the importance that scientific-technical progress has for increasing the effectiveness of production and the rise in labor productivity. One still encounters instances of conservatism, inertia, the habit of working "the old way," and the failure to understand that the acceleration of scientific-technical progress is not only an economic task, but also a very important social one. Its resolution will make it possible to eliminate more rapidly the differences between physical labor and mental labor, to free people from exhausting labor-consuming operations, and to bring them closer to creative work.

The decree of the CPSU Central Committee and the USSR Council of Ministers, entitled "Measures for Accelerating Scientific-Technical Progress in the National Economy" states that "the basic attention should be devoted. . . to the carrying out of those economic and psychological measures that would give all the participants in their creation and their introduction into production a personal interest in the renewing of technology and technological processes." The manner in which it is proposed to implement this principle can be seen in the example of the REZ Production Association, which is a participant in the economic experiment to expand the rights of the enterprises in planning and in economic activity. It is well known that previously the plans for new technology for the next year were drawn up in the first half

of the preceding year. But life does not stand still. The rates of development of technology are so headlong that frequently, instead of what has been proposed for introduction, something new and more progressive appears. However, the purchase and installation of those innovations in production are impossible — they have not been planned. Now the situation is different. The association can use, for the purpose of introducing initiatory measures, a single fund for the development of science and technology, in other words, can employ for themselves everything that is the most up-to-date and most promising. This same fund will be used to compensate the additional expenditures for the assimilation of the new output. Its credit capabilities are also being expanded. Whereas previously credit was granted to enterprises for measures which paid for themselves within three years, at the present time that period has been prolonged to six years.

In the course of the experiment the republic's State Committee for Labor intends to study attentively all the evaluational technical-economic indicators for the association in order to promote the locating of reserves for increasing the labor productivity.

Putting it more succinctly, at the present time, on the basis of the accumulated experience, a search is under way for the ways to reorganize industrial production, as is dictated by life. This also pertains to the economic mechanism of intensification. Let us take, for example, such an aspect of it as the guaranteeing of the well-substantiated correlation between labor productivity and wages. And although, for the republic's industry as a whole, there has been somewhat of an improvement in this indicator during recent years, the number of enterprises where the wage growth rates exceed the growth rates for labor productivity continues to be large. The largest number of them is in Goskomsel'khoztekhnika, Ministry of Light Industry, Ministry of Food Industry, and certain other branches. Organizations that have been regularly violating this correlation include the Parizes Komuna and Astotays Marts textile combines, the Ogre Knitwear Combine, the Mara and Druva Production Associations, most of the bread combines in Ministry of Food Industry, the Valmiyera and Liyepaya Meat Combines, the Riga Paint and Lacquer Plant, etc. One sees here, first of all, the effect of the insufficient rates of growth of labor productivity and the practice that has not yet been eliminated -- the practice of adjusting the production plans in a downward direction without changing the labor plans. As a result, the production of output decreases, but the wages remain unchanged. In addition, the persons who fulfill the reduced plans are frequently given bonuses. The sphere of application of normative planning of wages is still insufficient.

Something else that is closely linked with the process of accelerating the rates of mechanization and automation of production is the further improvement of the organization of labor and the establishment of norms for labor. The work of improving the norms for labor in the branches of the republic's national economy is being carried out constantly. For example, in industry during the past years of the 11th Five-Year Plan the number of persons working on the basis of branch and interbranch norms and quotas has increased noticeably, as a result of which approximately 2000 persons have been freed. Labor norms have been introduced for 80 percent of workers paid by time rates, and 84 percent of the ITR [engineer-technical workers] and employees. Nevertheless the question of improving the establishment of norms for labor remains a vitally important one; for the time

being, the level of fulfillment of the individual-output norms in a number of branches has been steadily rising, without a corresponding increase in the labor productivity. For example, in the first half of 1983, at 73 enterprises the wage growth rates outstripped the rates for increase in labor productivity. There have been more frequent instances when the norms have been reconsidered for purposes of lessening them, and when coefficients that have a reducing effect have been applied to the norms and quotas that are in effect. In the Rigas Manufaktura Production Association, for example, reduction coefficients are applied to more than 300 norms; almost one-fourth of the workers perform labor based on those norms. At the enterprise this is explained not so much by the poor quality of the raw materials as by the poor organization and by the working conditions that reduce the productivity of labor.

In November 1983, a session of the State Committee for Labor discussed the question of the status and measures for raising the level of norm establishment for labor in the branches of the LaSSR national economy. The decree that was enacted set down specific measures for expanding the sphere and improving the quality of the work of establishing norms for labor. Among the operations to improve the conditions, and to organize the labor and establish norms for labor, the recommendation was given to the ministries and departments, enterprises and associations, to carry out a quarterly analysis of the correlation between the increase in labor productivity and the average wages, and to strive for the unconditional reduction in the number of enterprises that fail to observe that correlation.

The practice of implementing the comprehensive target programs with regard to the reduction in the application of manual labor and the mechanization and automation of production indicates that all this work must be carried out in number of directions. What comes into the foreground here are technical progress; the increase in the responsibility for developing personal and collective creative plans that are aimed at the most rapid mechanization of the labor-consuming processes by using one's own efforts; and supervision over the introduction of the latest technical achievements into production. There is a rather large number of reserves in this regard. The establishment of the limits for the number of workers encourages us with every passing year to take increasingly energetic steps to mechanize the labor-consuming and subsidiary operations, and to direct our efforts toward the elimination of bottlenecks. By the end of the five-year plan it has been decided to pull up the work sectors that have been lagging behind, and to achieve a sharp acceleration in the rates of mechanization and automation of the operations. However, there is still a lot here that makes one reflect. For example, when studying the state of affairs at enterprises, it transpires that in a number of collectives the people sometimes develop and manufacture machinery intended for one and the same purpose. Why do they engage in this expenditure of efforts and funds, if they can borrow something from their neighbors? But who will undertake the manufacture of machinery for others? On the other hand, the experimental shops, sectors and laboratories that have been created for this purpose at enterprises are not yet legalized; their activities have not been regulated; and frequently they are simply low-power.

The branch and regional specialized scientific-research and planning and designing organizations, in our opinion, should have centers for the mechanizing of manual labor. Then it will be easier to combine the efforts of the enterprises in various branches for the purpose of developing and carrying out the accelerated

introduction of means of mechanization. It is only by the concentration of efforts and funds, by the carrying out of joint efforts, that one can achieve the acceleration of the process of mechanization and automation of the production processes, and, consequently, the substantial reduction of the application of manual labor and the economical use of labor resources.

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GOSKOMTRUD DEPUTY CHAIRMAN CALLS FOR NORM REVISION

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/Article by V. Kalashnikov, deputy chairman of the RSFSR Goskomtrud, candidate of economic sciences: "The Higher the Level of Norm Setting, the Fewer People Are Needed"/

/Text/ In the last few years we have been talking and writing a great deal, perhaps even too much, about the aggravated situation with labor resources and their shortage. However, have we learned to determine whether the personnel at a specific enterprise is sufficient and whether it actually experiences an acute need for the enlistment of manpower? Very likely, we have not yet learned this properly. It is no secret that often the same operations at allied enterprises in our country, as well as at similar enterprises in developed countries abroad, are performed with a smaller number of people. This depends to a significant extent on the state of labor norm setting and on the quality and substantiation of the applied norms.

What is the state of affairs in this area in national economic sectors in the Russian Federation? It should be noted that in the course of realization of the decree dated 23 May 1973 of the USSR Council of Ministers and the AUCCTU "On Measures To Improve Labor Norm Setting" a great deal has been done here. In particular, the sphere of application of labor standards at all production sections has expanded. In the republic's industry the share of time-rate workers, whose labor is normed, during the 10th and 3 years of the 11th Five-Year Plan increased from 47 to 78 percent and of engineering and technical personnel, from 28 to 77 percent. The labor of 85 to 98 percent of the time-rate workers and engineering and technical personnel is now normed at the enterprises of the Ministry of the Textile Industry, the Ministry of Light Industry, the Ministry of the Meat and Dairy Industry and a number of other republic ministries and departments.

The quality of existing norms is also improved, which contributes to an intensification of their effect on the rates of labor productivity growth and increases the objectivity of evaluation of the labor of every person. In 1983 the proportion of technically substantiated normsat jobs paid on a piece-rate basis reached 73.4 percent in industry and the share of piece-rate workers working according to sectorial, intersectorial and other more progressive standards, 74.6 percent.

The measures for improvement in norm setting made it possible to significantly increase the efficiency of utilization of manpower and labor productivity in a number of sectors and regions. For example, 36 to 38 percent of the norms were annually revised at the industrial enterprises of the Mari ASSR in 1982-1983. To a considerable extent because of this labor productivity increased there by 8.4 percent in 1983. Good results were attained at enterprises in Irkutsk, Novosibirsk, Saratov and a number of other oblasts.

At the same time, checks show that at many enterprises and organizations the state of affairs with norm setting does not meet the modern requirements of economic development. On the whole, for example, in the RSFSR industry in 1976-1983 the increase in the average wages of workers and employees per percent of increase in labor productivity comprised 0.8 percent and in construction of RSFSR subordination, 1.3 percent. At the enterprises of the RSFSR Ministry of the Fish Industry and of the RSFSR State Committee for the Grape Growing and Wine Making Industry, as well as at the construction organizations of most ministries and departments, norm overfulfillment increases much more rapidly than labor productivity. At the same time, a high level of norm fulfillment often is noted with a considerable downtime of machinery and equipment and big hidden work time losses, which is totally inadmissible, taking the situation with labor resources into consideration. At enterprises in Astrakhan, Ulyanovsk and Tyumen oblasts work time losses are slightly higher than the average in the republic. It would seem that this should be reflected in the level of norm fulfillment. In fact, however, this is not so. In these oblasts the average norm fulfillment surpasses average republic indicators to a considerable extent.

The inadmissibility of such a situation is obvious, which means that the further improvement in labor norm setting acquires special acuteness. What, in our opinion, should be done here?

First of all, we should regulate the very process of output (time) norm revision, which, unfortunately, now leaves much to be desired. Norms are revised irregularly, in connection with which many enterprises do not lower the normed labor intensiveness of output in accordance with the assignments for labor productivity growth established in the state plan. In the RSFSR industry the proportion of norms revised toward an increase was reduced from 20.8 percent in 1975 to 13.5 percent in 1983. Only 2 to 3 percent of the norms annually rise at the enterprises of the RSFSR Ministry of the Food Industry, the RSFSR Ministry of the Construction Materials Industry, the RSFSR Ministry of the Fuel Industry and a number of other ministries and departments. At such rates the replacement of the total number of existing norms would require half a century, although, in practice, labor organization during the five-year plan is improved to one degree or another at every production section.

At the same time, at many enterprises there are no annual plans for the revision of obsolete and lowered norms overfulfilled 1.5- to 2-fold. Output norms are not refined after the implementation of organizational and technical measures increasing labor productivity. For example, at the reinforced concrete articles plant No 1 in Astrakhan Oblast, on the average, norms are fulfilled 152.5 percent, but labor productivity not only fails to grow, but has declined by 30 percent. Despite this, they are not revised at the plant and normed shift assignments are not established for time-rate workers.

Approximately the same situation exists at a number of industrial enterprises in Murmansk, Kamchatka, Sakhalin, Tyumen and Magadan oblasts and the Yakutsk, Kalmyk, Komi and Tuva autonomous republics. In these regions labor is especially expensive both in the payment for it and in its social security and shortcomings in norm setting do great damage to the state.

What is the reason for this? In our opinion, the fact that some ministries and departments do not control the way the quality of norm is improved, cover in a planned manner the occurring overexpenditures of the wage fund or issue permits to enterprises for wage payment during the development of formal measures not ensuring compensation for the overexpenditure. For example, in the last few years the Tyumen'oblfoto Association has constantly tolerated an overexpenditure of the wage fund. It comprised about 5 percent during the first 6 months of last year. Organizational and technical measures are not fulfilled here systematically and do not ensure compensation for the tolerated overexpenditure. At the same time, disruptions in wages are not eliminated for a long time. Meanwhile, bonuses are awarded to workers at the full rate without due regard for the population's complaints about the failure to meet the dates of execution of orders and list prices and the low quality of services. The same exists in the Rostovoblfoto Association, where the periods of execution of orders reach 20 to 40 days instead of 3 to 4 according to the norm.

In some cases ministries, not troubling themselves with an analysis of the true state of affairs, permit in a planned manner an outstripping growth of average wages as compared with labor productivity for a number of enterprises. For example, in 1983 the RSFSR Ministry of the Meat and Dairy Industry gave such permits to 60 production associations, but the actual outstripping was only in 14.

In some sectors funds for wage payment are issued by USSR State Bank organs to the extent of fulfillment of indicators not approved in the state plan and even in the plans of ministries and departments, which creates the prerequisites for an unsubstantiated overstatement of their expenditure. For example, the Penzavodstroy Construction Administration approved an income plan, which was lower by 11 percent than the level attained during the preceding year, for the motor pool and it was overfulfilled by 72 percent. This made it possible to obtain in the bank, in addition to the planned wage fund, more than 400,000 rubles. For the following year the plan for this subdivision was again approved below the attained indicators.

All this points to the weakening of the attention of individual enterprise managers to labor norm setting and requires a detailed study with a view to increasing discipline in the expenditure of the wage fund and this, in turn, will prompt improvement in norm setting.

At the same time, it is hardly possible to fundamentally improve labor norm setting without an organization of system work in this area in coordination with the state plan for national economic development. In our opinion, it would be advisable to establish a single intersectorial procedure, according to which enterprises and organizations would simultaneously, once a year, revise obsolete and lowered output (time) norms, as well as norms for operations,

for which organizational and technical measures have been implemented. The extent of changes should ensure a standard release of manpower sufficient to fulfill the plan for labor productivity growth. In this connection, apparently, it is necessary to prepare methodological directives ensuring the coordination of the necessary level of decrease in the normed labor intensiveness of output (work), as well as the plan of measures for a revision of output (time) norms and manpower standards, with the approved assignments for a rise in labor productivity. To be sure, such a procedure does not rule out an improvement in the quality of norms during the year with due regard for the calendar periods of implementation of other organizational and technical measures.

Furthermore, the efficiency of work on labor norm setting, as well as of the presently implemented certification of work places, largely depends on the objective evaluation of the stepped-up nature of existing norms and standards. In our opinion, the instruction of the USSR Central Statistical Administration dated 24 November 1981 needs serious refinements. The inclusion in accordance with it of sectorial norms in technically substantiated ones irrespective of the time of development leads to the fact that often they lag behind the technical level of production development and their stepped-up nature becomes dissimilar for different enterprises. For example, sectorial standards approved in 1962 are applied at the Petrozavodsk Footwear Factory of the Leningrad Skorokhoz Production Association. Moreover, in various sectors and subsectors of the national economy norms are poorly coordinated with the technical capabilities of equipment. However, the inclusion of "other more advanced norms" in them even more "erodes" the boundaries between technically substantiated and experimental statistical norms. As a result, at many enterprises, although the share of technically substantiated norms is quite high, they are insufficiently stepped up and are overfulfilled significantly. For example, at the enterprises of the RSFSR Ministry of Light Industry their proportion is much higher than the average republic level, comprising 89.4 percent in 1983, and the average norm fulfillment (128.7 percent) greatly exceeds a similar indicator throughout the RSFSR industry. The same situation exists in the industry of Volgograd and Lipetsk oblasts and a number of other regions. In the industry of Astrakhan Oblast the share of technically substantiated norms increased from 75 percent in 1981 to 83 percent in 1983, whereas the average norm fulfillment by piece-rate workers rose from 125.9 to 127.9 percent. At the Tyumen Machinery Plant of the RSFSR Ministry of Culture the proportion of piece-rate workers working according to technically substantiated norms annually increased from 42 to 70 percent and their average fulfillment reached 157 percent.

Apparently, a closer relationship between technically substantiated output norms and the capabilities of equipment should be established. For this purpose it is advisable to develop them at the stage of planning of the construction of new or reconstruction of existing projects and to put them into operation simultaneously with projects, applying coefficients taking into consideration standard periods of mastering of planned capacities. Norms for operations, where such a regulation is impossible, could be included in technically substantiated norms only in case of their approval by the head (with the largest volume of application of these types of operations) ministry in accordance with the Central Office of Labor Norm Setting of the USSR Goskomtrud.

It is also necessary to refine the procedure of reporting on the fulfillment of output (time) norms and to increase the responsibility of workers of enterprises and organizations for its reliability. Reports submitted to statistical organs often do not reflect the true situation, because at a number of enterprises and organizations they are prepared without a sufficient analysis with a distortion of the work time actually spent on the performance of operations. For example, the report of the Penzavodstroy Administration of the RSFSR Ministry of Land Reclamation and Water Economy indicates that, on the average, norms are annually fulfilled 109.6 percent. If this magnitude is calculated on the basis of the proportion of the rate of the average category of jobs in piece-rate wages, it would comprise about 170 percent. As we see, the difference is significant and this is not an isolated example. In some mobile mechanized columns of this administration in job authorizations the dates of beginning and end of jobs are not noted, norm fulfillment is not calculated and their substantiation (cipher) is not indicated.

The following circumstance also hampers an analysis of the correlation of the rates of growth of labor productivity and average wages. As is well known, a number of sectors have been granted the right to increase wage rates by 20 percent or to raise them with due regard for packing zones. For example, in the system of the RSFSR Ministry of the Textile Industry the average norm fulfillment according to the report for October 1983 comprised 116.3 percent. If, however, it is defined as the ratio of the added wages based on piece rates to wages based on wage rates, the level of fulfillment rises approximately to 140 percent.

Checks also show that many enterprises include the norms that have been inventoried, but have remained at the previous level, as revised norms in the report. Unfortunately, cases of norm revision toward weakening are also observed. According to the report for October of last year, throughout the RSFSR industry only 6.18 percent of the norms were revised, including 13.5 percent were raised. Therefore, one-fifth of the total number of the revised norms was left at the previous level or weakened. Such a practice has become most widespread at enterprises in Kalinin and Sverdlovsk oblasts, the Dagestan ASSR and some other regions. It seems to us that at the level of enterprises and sectors there is a need for a single methodological approach to the determination of the average percent of norm overfulfillment through piece-rate wages and wage rates, or for purposes of control it should be utilized in addition to existing indicators. With regard to norms checked and left at the previous level, as well as norms for new types of jobs, they should not be included as revised norms in the report.

Padding, especially in the performance of construction, transport, loading-unloading and a number of other auxiliary operations, does considerable damage. On the basis of checks by the RSFSR Goskomtrud it is possible to cite many examples, when shortcomings in labor organization, work time losses and downtime due to an unsatisfactory material and technical provision are hidden through the padding of volumes of auxiliary work. During a check of calculations in some construction organizations it has been disclosed that padding often comprises up to 30 or 40 percent. In the checked construction organizations and farms of Stavropol Kray the overpayment to 79 brigades of temporary workers as a result of padding, overstatement of rates and incorrectly paid

bonuses totaled 256,000 rubles. On the Zakumskiy Sovkhoz in the same kray at the construction of sheds for livestock it was established by a control measurement that the volumes of work were overstated by 45 percent, as a result of which more than 12,000 rubles were paid illegally.

The fight against such phenomena requires the intensification of control, including on the part of labor organs. For the purpose of increasing its efficiency it would be advisable, in our opinion, to extend the rights of these organs and to permit them to apply sanctions to enterprises and specific officials for a breach of discipline in the recording and remuneration of labor and the utilization of labor resources.

Obviously, existing forms and methods of setting the norms of labor of time-rate workers and engineering and technical personnel need to be improved further. In the industry of the Russian Federation the proportion of piece-rate workers was reduced from 71 to 51 percent as compared with 1975. In other words, at present nearly one-half of all the workers are paid according to the time rate or time rate plus bonus wage system. During this period the share of engineering and technical personnel in industrial and production personnel rose from 16.6 to 18.7 percent, although the scope of their labor norm setting increased considerably. Checks show that the labor of workers paid according to the time-rate plus bonus wage system often is normed formally. In a number of sectors the standards of the force of workers and employees are not mobilizing, because in some cases they are approved without due regard for the state of manpower utilization and the achievements of advanced domestic and foreign enterprises. This enables enterprises to fit in such standards in the presence of considerable work time losses. In some sectors and industries, however, there are no standards for engineering and technical personnel at all to this day.

In practice, at many enterprises normed shift assignments are not established for time-rate workers and the award of bonuses to them often does not depend on the fulfillment of the output plan. For example, during a check of the Vladimirstroymaterialy Association it was disclosed that the schedules of planned preventive maintenance were disrupted there, the recording and analysis of the unplanned downtime of basic technological equipment were made poorly and its accident rate was high. As a result, the capacities for the production of some types of products were not utilized fully. At the same time, there were serious shortcomings in the setting of norms of repairmen's labor and at a number of sections its remuneration was not coordinated with the fulfillment of the output plan and normed shift assignments.

In the process of checks significant omissions in the setting of the norm of brigade labor are also disclosed. At some enterprises their optimum composition and zone of action are not determined and insufficient overall brigades including repair and other auxiliary personnel are established, which lowers the financial interest of this category of workers in end results, reduces the possibilities of combination of operations and complicates the organization of norm setting. For example, at the enterprises of the RSFSR Ministry of Light Industry, the RSFSR Ministry of the Fuel Industry and the RSFSR State Committee for Supply of Production Equipment for Agriculture 70 to 80 percent of the auxiliary workers work individually and there are few overall brigades at the industrial enterprises of Penza, Voronezh, Ryazan and a number of other oblasts.

At some enterprises the conditions of remuneration and the adopted procedure of setting of the norms of labor of members of primary labor collectives have not been worked out with due regard for the stimulation of the most important indicators of specific production and do not ensure financial interest in the total results of labor and in a decrease in the number of workers. For example, at the Saratov Tobacco Factory workers of many brigades are paid at individual rates and output norms are revised extremely rarely. Conversely, here and there individual interest in general results is insufficient and only extra earnings comprising 4 to 5 percent of the wages are distributed by means of the coefficient of labor participation.

In the textile industry in sewing shops there are brigades, in which a significant number of workers are paid according to the time rate plus bonus wage system, including the brigade leader. At the same time, the amount of a bonus depends basically on the degree of fulfillment of assignments for output, which, essentially, interests them in maintaining the previous size of personnel. To be sure, the transfer of such collectives to overall norms and rates would contribute to the further rise in labor productivity and decrease in the need for manpower.

The experience of advanced enterprises indicates that a brigade works efficiently only when the labor of all its members is remunerated at a single overall rate and a reliable recording of its individual results is organized. In connection with this the experiment in the application of the collective contract at sections, shops and other structural subdivisions conducted at 13 enterprises and organizations, as well as on two sovkhozes in Novosibirsk Oblast, as of 1 January of this year is of great importance. Its essence lies in the fact that the collective of a shop or section, including foremen, technologists and auxiliary and other workers, is transferred to payment according to a single stable standard of wage expenditures per unit of volume of output (work). The collective bonus fund is formed so as to ensure planned and other qualitative indicators. Basic wages and bonuses are distributed according to individual work indicators by means of the coefficient of labor participation. The first results show that at sections, where a proper organization of labor and its remuneration is ensured according to experimental conditions, planned assignments are overfulfilled and, at the same time, the number of workers decreases significantly.

In our opinion, in order to more fully realize the possibilities of the brigade form, ministries and departments should refine and revise existing sectorial instructions and statutes, envisaging there, in particular, optimal zones of functioning of brigades with due regard for an increase in the completeness of their composition according to types of subsectors and industries. It is also necessary to develop correct methodological approaches to the formation of overall norms.

We shall now touch on the following problem. Many enterprises and organizations strive for an increase in the stepped-up nature of output norms in an insufficiently active manner, fearing that, as a result, the average wages of workers will be lowered. At the same time, they refer to the imperfection of the wage-rate system. This is incorrect. First, ministries and departments

have been granted the right to submit proposals to the USSR Goskomtrud on the introduction of rates raised to 20 percent during work according to progressive technically substantiated norms at enterprises of individual sectors of industry. Second, the established systems of award of bonuses to workers make it possible to pay bonuses up to 40 percent and in some sectors up to 60 percent. Furthermore, appropriate statutes on the award of bonuses from production costs for the saving of material resources and the material incentive fund are in effect. However, this entire mechanism, which, in practice, makes it possible to introduce plan norms, or other sufficiently stepped-up norms, often is not utilized. For example, to this day no republic ministry and department has submitted proposals and received a permission to apply increased rates.

A significant part of labor resources is not utilized productively at newly commissioned projects. For example, a survey conducted by the RSFSR Central Statistical Administration at more than 900 projects of republic ministries and departments put into operation after 1975 has shown that an above-plan size of industrial and production personnel is kept on one-fifth of them and one-half has not attained the planned level of labor productivity. A great deal depends here on the quality of planning and construction, the technical and economic study of the raw material base and the completeness and structural reliability of the installed equipment. At the same time, the periods of attainment of planned technical and economic indicators at many projects could be shortened to a significant extent as a result of a modern organization and remuneration of labor and improved methods of its norm setting. Unfortunately, this is not done in practice. For example, at the Kursk Silicate Brick Plant put into operation in 1979 the planned capacities for brick production have been mastered at the rate of 56 percent and 20 percent of the workers are kept in excess of the plan. At the same time, the average fulfillment of output norms by piece-rate workers comprises 156.8 percent, all of them being considered technically substantiated. Apparently, under these conditions it would be advisable to develop, with due regard for the experience of the Volzhsk Motor Vehicle Plant and a number of other enterprises, standard statutes on the setting of the norms and remuneration of labor for newly commissioned projects.

Thus, the role of norms in the stimulation of labor productivity growth largely depends on a correct evaluation of their quality and the process of their development. Norms should reliably eliminate wage leveling and ensure equal pay for equal socially useful labor. As K. U. Chernenko, general secretary of the Central Committee of the Party, stressed at the extraordinary February (1984) Plenum of the CPSU Central Committee, everything should be done "in fairness, in accordance with the labor contribution of every person to our common cause." Therefore, measures to improve norm setting must always be coordinated with improvement in bonus and other stimulating systems with due regard for the characteristics of specific production.

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EQUILIBRIUM BETWEEN WORKPLACE, LABOR RESOURCES SOUGHT

Moscow IZVESTIYA AKADEMII NAUK SSSR--SERIYA EKONOMICHESKAYA in Russian No 3, May-Jun 84 pp 25-32

[Article by V.F. Onishchenko: "Problems of Equilibrium of Workplaces and Labor Resources" (Numbers in brackets refer to bibliography; passages in italics enclosed in virgules)]

[Text] This article categorically defines a "workplace" and outlines specific methodological approaches to quantitative and qualitative consideration of workplaces in aggregate in the national economy. It illustrates the influence of a number of factors, including investment processes, on the equilibrium of living and past labor. And it proposes measures for controlling the process of achieving and maintaining an optimal correlation between existing and created workplaces, and labor resources.

The Basic Directions of the Economic and Social Development of the USSR for 1981-1985 and for the Period up to 1990 outlines the necessity for taking measures to achieve a state of equilibrium between existing and created workplaces, and labor resources [1]. There are a number of reasons for posing this problem and the urgent need to solve it. Foremost among them is the shortage of manpower, which at the present time has become one of the factors limiting economic development. The shortage of labor resources came about objectively by virtue of existing demographic, economic, social and other factors. The most important of these are: the decline in the growth of that portion of the population which is at the working age; the fact that the possibilities for increasing the level of employment of the population have been exhausted; insufficient growth in labor productivity; and others.

In contemporary conditions, extensive factors still play a prominent role in the reproduction of the social product--which brings about a significant increase in the number of workplaces; and as a result the need to recruit additional manpower--the sources for which have been exhausted. In other words, the increase in workplaces exceeds the available labor resources. Naturally, this makes the shortage of manpower more acute; moreover, in certain situations, it can be the principal reason for the shortage.

One has to agree with the opinion of V.M. Gzovskiy: "Although the manpower shortage can always be reckoned by means of counting the number of unoccupied workplaces, it is only in recent years that the conception was formed that the shortage in labor resources reflects not only a decline in the dynamics of the demographic processes and insufficiently-high labor productivity, but also a simultaneous introduction of surplus volume of fixed capital with respect to the amount of labor resources. In other words, the situation in the area of manpower should be examined not as a problem of insufficiency, but as a problem of equilibrium" [3].

At present there is a trend in this country, and especially in the Ukrainian SSR, toward an increase in the number of vacant workplaces. And this leads to a situation where capital investments for creating unutilized workplaces is immobilized, and the increased demand for workers leads to a decline in production discipline, to significant losses of work time, and the like.

As the results of round-the-clock observance of the use of manufacturing (metal-working) equipment at the machine building enterprises of the country's machine building ministries show, because of the unfilled workplaces, 26.3 per cent of the metal-cutting machine tools; 23.1 per cent of the forging and pressing machinery; 21.0 per cent of the electric welding machines; and 16.1 per cent of the casting equipment--was standing idle [4].

According to our calculations, for this reason in the Ukrainian SSR alone, there is an annual loss to the national income of more than two billion rubles.

The imbalance between the number of workplaces and the available labor resources is a result of imbalance in branch plans for expanding production and reproduction of the labor potential in the localities. This situation is intensified by the lack of control on the part of the planning organs over the process of establishing new workplaces.

Eliminating the existing disproportions requires working out a complex of measures directed toward eliminating the causes which give birth to them, and increasing the efficiency of use of the labor potential. Careful accounting for workplaces both in the branch and in the territorial cross-section will be the principal factor in this process.

Calculating the indicators for the number and the structure of workplaces should be based on perfecting economic analysis, planning and management of effective reproduction of labor resources. This will permit evaluating more precisely the need for workers in the individual branches and enterprises, which at the present time is planned on the basis of the level attained, and in many cases is inflated in order to create more beneficial conditions for fulfilling the production plan. Proceeding from the indicators for the number of workplaces, one can calculate the limits of the number of workers and employes. Quantitative and qualitative accounting of the positions for applying labor is the basis for systematically introducing measures for technical and technological retooling of industry, in terms of: reducing the amount of manual labor; scientific organization of labor (NOT); proper selection and distribution of working cadres; and others.

A methodical approach toward solving this problem should be based on a precise understanding of the term "workplace". Economic literature presents various definitions. For example, N. Gorelov, Yu. Lavrikov and V. Kolesnikov note that: "From the socio-economic point of view, a workplace is the dialectical unity of the quantitative and qualitative aspects of a definite form of the primary link in the manufacturing and technological structure of an enterprise (organization), which requires one or more workers of the appropriate profession and skills, to put it into operation in the course of a work day. A workplace has a certain zone, limited in its area, for the application of labor..."[5]. I. Malmygin understands the workplace as: "A zone furnished with the necessary technical means, intended for the labor activity of one operator, for the purpose of carrying out work or operations..."[6]. L. Dorokhova and R. Kolosova define a workplace as a place for application of individual labor, a form of organization of the physical elements of production, the operation of which in the course of a work day requires the application of labor of one worker of a certain profession and skill [7]. And G. Mikheyev understands a workplace as a unit of production force, characterized by a definite aggregate of the means of production and manpower necessary for accomplishing an organizationally and technologically isolated portion of the production process with standard efficiency [8].

As one can see, the definitions of a workplace cited above do not have enough in common and, in our opinion, do not reflect its qualitative and quantitative content with sufficient accuracy. The workplace as a planning and statistical accounting category has its special features which are defined by the nature of the work, and by the specific features of the equipment and implements of labor in this or that branch. For example, in industry and in construction a workplace includes the basic and auxiliary production equipment. In agriculture, a workplace includes, along with all possible mechanisms and machinery, the agricultural site and the number of cattle as well. In the nonproduction sphere, a workplace is defined by the standard of service to the populace rendered by one employee. It is not clear from the given definitions what sort of quantitative and qualititative parameters lie at the basis of the allocation of a workplace.

A common economic category which permits precisely describing its spacial limitations and which can be expressed quantitiatively should be the starting point for defining the concept of "workplace." Such a category is, in our opinion, the expenditures of labor and their modifications, in particular the technological norms for utilizing the means of labor (expenditure of past labor). Any labor activity of a worker in material production or in the nonproduction sphere is regulated in space and time by means of the norm for expenditure of labor and servicing of the required equipment for producing an assigned volume of production or rendering of services. Consequently: /A workplace is a quantitatively-allocated means of technical-economic and technological norms and normatives, which is limited in space, for utilizing and servicing the means of labor, necessary for producing a fixed volume of production or rendering of services by one employee in the course of a work day./

At the same time the number of workplaces does not depend on the shift work at the enterprise, as certain economists assert. Specifically, N. Kozlov writes that: "If a certain combination of the means of production is put into operation by a single worker, then this is one workplace under the conditions of one-shift operation; and if two--then two-shift operation."[9] A workplace from the technical-economic point of view is defined as the means and implements of labor fixed in space and time. The conditions of their work have no affect on the quantitative and qualitative characteristics of the workplace (except for the physical and moral wear and tear of the equipment). Several persons in succession can work at one and the same workplace. The shiftwork functioning of the latter determines the need for manpower for the regulation period of its operation under the conditions assigned.

In the light of the above definition of a workplace which we have given, the standardization of labor and the creation of a progressive normative basis as the most important condition for achieving equilibrium of workplaces and labor resources, take on special significance. This is brought about by the fact that standards determine, on the one hand the need for manpower for producing a given amount of products, taking into consideration the achievements of scientific and technical progress; and on the other, the required set of implements and objects of labor for the output of a given volume of products, or for the rendering of services by one worker; that is, it fixes the workplace.

Standards of expenditure for living and past labor at many enterprises do not meet the requirements of intensive development of the economy, which has an immediate effect on the proportions between the existing labor resources and workplaces. The use of a standard method of planning is to a great extent held back by the lack of a system of unified and scientifically-based branch and interbranch norms for the expenditure of labor, implements and objects of labor per unit of output. This situation not only impedes the intensification of production and rationalization of workplaces, but in the conditions of a multitude of different kinds of standards, leads to lack of coordination in calculating them. Therefore, as of the present, no unified system of integrated standards will be put into practice in the economy; and optimization of the correlation of workplaces and labor resources will remain extremely problematical, since there is no reliable method for evaluating the number of workplaces, their structure, and the need for them in appropriate terms of manpower.

But it is fitting to represent the workplace as a statistical accounting unit once and for all. Its characteristics are dynamic in the quantitative and qualitative respects, and are determined by many factors. For example, the workplace of a person who operates a number of machines simultaneously consists of several machines. With the introduction of the achievements of science and technology, servicing several machines in a given branch will become a common event, and the number serviced by a single worker may even be increased. Consequently the parameters of a workplace as a combination of means for production, localized in time and space, and put into operation by a single worker, in the given situation is changed quantitatively.

Therefore, accounting for workplaces and subsequently defining their number precisely should proceed from existing and future technically-based norms for expenditure of living labor for the planned volume of production or rendering of services, taking into consideration the specific operating features of the enterprise.

In recent years, economic literature has given quite a bit of attention to the problem of accounting for workplaces (See, for example, [5,6,7,8]). According to proven opinion, in order to determine the number of places for application of labor, it is necessary to certify equipment and technological processes and to calculate the standard for labor-intensiveness of production, equipment operation shifts, and the technical-economic characteristics of places for the application of labor. Proceeding from the information provided, an official balance of workplaces is compiled--which reflects the number at the beginning of the year, the activity for the official period and the average annual number of workplaces--and the requirement for manpower is calculated. On the basis of the generalization of balances of workplaces at an enterprise, the balances are worked out for the branch and the territorial sectors.

For the future balance, the structure and dynamics of the formation of workplaces, changes in the distribution of social labor, and branch and territorial employment ratios are established on the basis of analysis of the use of fixed capital and labor resources, taking into consideration the tasks for economic and social development, as well as the volumes of capital investments allocated.

It is especially important when solving problems at all levels of the national economic complex, to consider its qualitative aspect; that is, the correlation of the professional and skill training of the workers to the technical-economic characteristics of the workplaces, inasmuch as the quantitative equilibrium of workplaces and labor resources can not only not solve the problem, but it may even make its realization more difficult in the future. As a result of not observing the given requirements a situation is entirelfeasible in which a shortage of workers could be observed in one professional-skill group, and a surplus in others, in the presence of a general quantitative correlation of manpower to workplaces. Eliminating such a disproportion requires significant additional expenditure for retraining and redistribution of the working cadres. Therefore, precise knowledge of the availability of workplaces and their technical-economic characteristics, and also of the number and qualifications of the required manpower--is the necessary condition for optimal correlation between living and past labor.

Equilibrium of workplaces and labor resources should be achieved in accordance with investment processes, since the volume and the distribution of capital investments for new construction and reconstruction of existing enterprises, for technical retooling, automation and mechanization of manual and supporting work, the introduction of NOT measures, and construction of a social and domestic infrastructure, determine the number of workplaces and their qualitative characteristics.

The interaction between capital investments and labor resources is mediated by the workplace. On the one hand, each workplace can characterize a certain capital-output ratio (cost), which reflects the full expense to society required for the efficient operation of the entire combination of the means of production and living labor inherent in a given workplace; and on the other, the system of workplaces determines the need for manpower. Thus, the volume and structure of capital investments, while bringing about certain quantitative and qualitative changes in the system of workplaces, predetermines the need for manpower and the level of its efficient use. And the other way around, the presence of labor resources and their qualitative characteristics have an effect on the volume and structure of investments through the requirement for workplaces. Disproportion between these subsystems of the national economic complex gives rise to a shortage in labor resources and leads to immobilization of capital investments.

Obviously, if the demand for manpower exceeds the supply, it is necessary to first regulate the demand, since in the given situation, the supply has its natural limits, determined by the nature of the demographic processes. Regulation of demand for manpower is the regulation of socially necessary expenditure of labor for planned product output. But the very same production volume can be achieved either by means of introducing new capacities and recruiting additional manpower--or by means of intensification of production. Clearly, under conditions of limited possibilities for recruiting manpower it is proper, on the one hand to fill the workplaces with the available labor resources, and on the other to increase the effectiveness of use of the labor potential.

Consequently, solving the problem of equilibrium in the number of workplaces and the number of workers in conditions of a decline in the growth of labor resources has two basic aspects: 1) limiting the number of newly-created and reducing the existing workplaces; and 2) rational use of the existing labor resources.

In order to limit an unfounded increase in workplaces it is proper, in our opinion, to introduce certain changes to investment policy. At the present time the national economy of the country, and especially its European part, is characterized by a high level of concentration of economic activity and a shortage of many important resources, including labor resources. And thus, the number of workplaces is created cannot be supplied with manpower, neither by virtue of growth in labor resources, nor at the expense of actually releasing workers from existing production and then reassigning them to new projects. Therefore, under these conditions capital investment should be oriented toward all-round intensification of social production. And erection of new economic objectives should be carefully and thoroughly justified, taking into consideration the national economic, regional and branch interests. The economic foundation of decisions on new construction or reconstruction of existing industries requires, in particular, perfecting the methodological and methodical situations for determining aggregate social expenditures for supplying manpower for one version of development or another. In our opinion, if it is necessary to construct a new objective

consideration should be given at the national economic and regional levels to compensating the functioning industries for the manpower drain (so-called "compensatory" expenditures)--in addition to the expenditures for recruiting and assigning cadres, and creating the necessary conditions for the vital activities of the workers and their families. By virtue of the fact that these expenditures are differentiated in the branch and territorial profiles, they can be considered as a supplementary--but sometimes also the decisive--factor on which the location of new objectives is based, taking into consideration the hierarchy of interests regarding the use of labor resources. Moreover, comparison of branch variations for development, taking compensatory expenditures into consideration, leads to growth of aggregate expenditures for creating the new objectives; which--other things being equal--promotes choosing the variant of modernization and reconstruction of existing industries.

Naturally, arguing the positions described above requires carying out special, thorough research. However, one can state with confidence that accounting for compensatory expenditures permits presentation of a sounder argument for the economic expedience of this or that variant for development of production and redistribution of labor resources.

The decisions of the 26th CPSU Congress and the November (1982) CPSU Central Committee Plenum indicated the necessity for devoting paramount attention to reconstruction and renovation of existing industries, as opposed to building new ones (See [2]). Reconstruction and modernization of existing fixed capital facilitates eliminating many obsolete workplaces, and qualitatively improves their operation and, as a rule, other things being equal, leads to reduced employment. However, in the Ukrainian SSR, for example, 35-40 per cent of the total volume of capital investments are directed toward retooling and reconstruction of existing enterprises and more than 55 per cent to increase of workplaces--which, under conditions of difficulties with supplying manpower for existing objectives intensifies the imbalance of workplaces and labor resources [10].

Definite measures are needed to change the correlation between new construction and reconstruction of existing enterprises, and to stimulate on this basis the process of actually releasing employes and supplying manpower to new industries. One proposal for such measures would be expanding the rights of the local Soviets of People's Deputies on questions of coordinating certain aspects of planned tasks for new construction, limiting the growth of workplaces and use of labor resources. Capital investments for expanding industry and for new construction must be assimilated under conditions of complete utilization of existing capacities and possibilities for rationalization of basic and supporting industries.

Achieving a state of balance under conditions of shortages of all resources, including labor, is to a large extent determined primarily by improving the use of existing resources. Therefore, an important condition for equilibrium between existing and newly created workplaces and labor resources is rational use of the latter, eliminating inefficient positions for application of labor by means of overall mechanization and automation of production, introduction of NOT, reducing lost working time, and use of progressive norms.

Urgent attention should be given to reduction of manual, physically-demanding, and low-skilled labor; and to increasing the level of job mechanization, especially for materials handling, loading and unloading, warehouse work, and other kinds of auxiliary operations--inasmuch as approximately three-fourths of the total volume of such work is done manually, while labor productivity is a lot lower than for mechanized work. At the present time branch, regional and union republic authorities in the country as a whole are developing programs for reducing manual labor. These programs should become an important, integral part of the state plans. According to our calculations, implementing such a program in the Ukrainian SSR alone in the 11th Five Year Plan will permit releasing about 700,000 employes and sending them to other branches and industries.

Scientific organization of labor [Nauchnaya Organizatsiya Truda--NOT] plays a large role in ensuring the rational use of labor resources and reducing the number of workplaces. In the 10th Five Year Plan, by virtue of introducing NOT, in the planning circle of the ministries alone, manpower requirements in the Ukrainian SSR were reduced by more than 317,000 persons, and the economic effect was greater than 626 million rubles [11].

There are still large losses of worktime, which naturally reduces labor productivity, and requires enlisting additional workers in order to fulfill the production program.

Special attention should be devoted to increasing the shift index for equipment operation, rationalizing production cooperation and specialization, and perfecting the organizational structure of production and systems for its control.

Measures for ensuring equilibrium between workplaces and available labor resources should be of a comprehensive nature, and their implementation should be reflected in the appropriate branch and regional planning documents. At the present time, such comprehensive special-purpose programmed planning documents as the republic, oblast and branch "Trud" [Labor] programs have found wide use in the Ukrainian SSR [12].*

The basic goals of such programs are: ensuring the growth of labor productivity in all branches of the national economy in accordance with the planning indicators; reducing the number of persons employed at manual labor; and, developing and implementing a system of measures for improving territorial-branch allocation and reallocation of labor resources.

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* Republic, oblast and branch "Trud" programs have been developed for the 11th Five Year Plan in the Ukrainian SSR on the initiative of the Central Committee, Ukrainian Communist Party, the UkSSR Council of Ministers, the UkSSR Academy of Sciences, and Goskomtrud [State Committee for Labor], UkSSR. The methodological and methodical aspects of their development and implementation were examined in detail in [13].

In order to achieve the goals envisaged, solutions are being sought to a complex of interrelated tasks of a branch, interbranch and regional nature. Questions of mobilizing existing reserves for growth of labor productivity are being given first priority. Various aspects of retooling of industry are given special attention in the complex programs.

At the same time, the implementation of the "Trud" program could, in our opinion, be more effective if the problem of quantitative and qualitative definition of the workplaces and the possibilities for using their manpower could be solved simultaneously. Such calculations should be carried out at all levels of developing and implementing the programs.

Rationalizing the system of workplaces and implementing it in accordance with available labor resources requires developing and introducing forms of management which would stimulate reduction in manpower and workplaces, under the conditions of mandatory execution of planned tasks for production output. But in order for the managemen to be effective, a system of economic levers is required for stimulating a labor-saving strategy at all levels of the national economic complex.

As is well-known, a system for limiting the number of employes at the enterprises, associations and organizations of all branches of the national economy has been introduced in the practice of planning and control at the present time. It is suggested that the methodical basis for working out the limits should be, primarily, determining the actual requirements of an enterprise for manpower, proceeding from progressive norms for expenditure of living labor for carrying out planned work, and from existing workplaces. Introduction to national economic practice of scientifically-based limits for employment is, undoubtedly, an important and timely step on the way to strengthening intensification of production. However, the effect would be significantly greater, if at the same time strict economic sanctions would be employed for maintaining more workers and employes than the limit permits. The existing sanctions for violating the limits are not very effective. In an extreme case, upon representation of the regional authorities of USSR Goskomtrud or that of the union republics, the administrators of an enterprise could lose up to 50 per cent of their bonuses for the year's results, with the consent of their superior branch organizations. In our opinion, for maintaining more workers and employes than the limit permits, an enterprise should have to make payments to the regional budget from its incentive funds. The size of such punitive sanctions should depend directly on the excess number of workers and employes, considering to a certain degree the social expenditures for reproduction of its qualitative characteristics. Specifically, an enterprise's NRB [possibly, Budget for Authorized Personnel] should make compensation from its material incentive fund to the state budget in an amount equal to the average annual wages of each worker maintained above the limits.

And making the payments to the local budget will promote establishing a cost accounting relationship between the branch and the region for use of resources, as well as expanding the material basis and increasing the quality of the reproduction of the labor potential, since a number of very important socio-economic conditions in the life and activities of the populace can be provided effectively only on a regional level.

At the same time, the use of punitive sanctions alone for maintaining a greater number of workers and employes than the limit permits cannot completely solve the problem of equilibrium of workplaces and labor resources. In order to do this it is necessary to regulate, in conformity with social needs, the quantitative and qualitative characteristics of the place of application of labor. Specifically, it requires improving the scientific basis for the need to create new workplaces, in order that a situation does not arise in which their operation is impossible due to lack of manpower with the training in the appropriate profession and skill. The existence of surplus workplaces is a matter of direct damage to the national economy, since the expenditures for creating them take no part in the reproduction of the social product; as a result society does not receive significant amounts of additional products needed to satisfy the needs of associated manufacturers. Consequently, an enterprise should bear a certain material responsibility to society. Payments for vacant workplaces should be made when the enterprise has reached its planned capacity, since it is precisely in this situation when miscalculations can be observed in unfounded introduction of capacities for planned product output, and unfounded orientation toward extensive development without the proper basis for this. Accounting for vacant workplaces should be made according to the official balance of workplaces. The amount of the payment should reflect not only the social expenses for creating a surplus workplace, but also the income possible when it is in operation.

Thus, on the one hand, sanctions for carrying more employes than the limit permits will limit the increase in the number of workers and employes; and on the other, payment for vacant workplaces will stimulate reducing the number of workplaces and putting them into line with available manpower.

This article has examined certain aspects of the problem of equilibrium of workplaces and labor resources. But working out the specific methodical approaches for regulating this complex process requires more comprehensive research.

BIBLIOGRAPHY

1. "Materialy XXVI s"yezda KPSS" [Materials on the 26th CPSU Congress], Moscow, Politizdat, 1981, p 141.

2. "Materialy Plenuma TsK KPSS (noyabr', 1982)" [Materials on the November 1982 CPSU Central Committee Plenum], Moscow, Politizdat, 1982.

3. V.M. Gzovskiy, "Problemy sbalansirovannosti ispol'zovaniya vosproizvodstvennykh resursov v stranakh SEV" [Problems of Equilibrium in the Utilization of Production Resources in the CEMA Nations], IZVESTIYA AKADEMII NAUK SSSR, SERIYA EKONOMICHESKAYA, 1982, No 2, p 107.

4. VESTNIK STATISTIKI, No 4, 1983, p 69.

5. N. Gorelov, Yu. Lavrikov, V. Kolesnikov, "Organizatsiya ucheta rabochikh mest i obespechenie ikh sbalansirovannosti s trudovymi resursami" [The Organization for Accounting for Workplaces and Ensuring their Equilibrium with Labor Resources], PLANOVOYE KHOZYZYSTVO, 1982, No 3, pp 82-83.

6. I. Malygin, "Sbalansirovannost' rabochikh mest i trudovykh resursov" [The Equilibrium of Workplaces and Labor Resources], PLANAVOYE KHOZYAYSTVO, 1982, No 8, p 58.

7. L.S. Dorokhova, R.N. Kolosova, "Ispol'zovanie trudovykh resursov na sovremennom etape" [Use of Labor Resources at the Modern Stage], IZVESTIYA AKADEMII NAUK SSSR--SERIYA EKONOMICHESKAYA, 1981, No 2, p 108.

8. G. Mikheyev, "Sushchestvennaya predpolsylka ratsional'nogo ispol'zovaniya rabochey sily" [The Necessary Prerequisite for Rational Use of Manpower], KOMMUNIST, 1982, No 13, p 56.

9. N. Kozlov, "Analyz obespechennosti predpriyatiya (otrasli) rabochey siloy" [Analysis of the Supply of Manpower at an Enterprise (Branch)], PLANOVOYE KHOZYAYSTVO, 1983, No 2, p 99.

10. "Narodnoye khozyaystvo Ukrainskoy SSR" [The National Economy of the Ukrainian SSR], Kiev, Tekhnika, 1982, p 220.

11. N. Pantaleyev, "Vazhnyy faktor povysheniya proizvoditel'nosti truda" [An Important Factor in Increasing Labor Productivity], SOTSIALISTICHESKIY TRUD, 1982, No 2, p 66.

12. "Metodicheskie rekomendatsii po razrabotke regional'noy tselevoy kompleksnoy programmy 'Trud'" [Methodical Recommendations for Developing a Regional Special-Purpose Complex "Trud" Program], Kiev: Ukrainian NIINTI [possibly, Scientific Research Institute for Scientific and Technical Information], 1983.

13. V.V. Onikienko, E.M. Libanova, V.F. Onishchenko, M.V. Prozhogin, "Programmno-tselevoye upravlanie vosproizvodstvom trudovykh resursov" [Programmed Special-Purpose Management of the Reproduction of Labor Resources], Kiev, Nauka Dumka, 1983.

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INTERIM RECOMMENDATIONS FOR WORKPLACE CERTIFICATION IN INDUSTRY

Moscow EKONOMICHESKAYA GAZETA in Russian No 20, May 84 pp 11-14

[Text of "Certification of Workplaces. Interim Intersector Recommendations for Certification of Workplaces in Industry"]

[Text] On the basis of a generalization of experience in the operation of associations and enterprises in the industrial sectors and material from seminars conducted at the Dnepropetrovsk Combine Plant, and taking into account proposals from the labor collectives, the "Interim Intersector Recommendations for Certification of Workplaces in Industry" were confirmed on 23 April 1984 by the USSR State Committee for Labor and Social Problems with the agreement of the AUCCTU.

Systematic certification of workplaces should become an important direction in further improving the organization of production and labor and in improving the balance between workplaces and available manpower.

1. General Provisions.

1.1. Certification of workplaces will be done in accordance with the decisions of the 26th CPSU Congress on the need to achieve a balance between available and created workplaces and manpower resources.

At the CPSU Central Committee December (1983) Plenum note was made of the great significance of mandatory certification of workplaces in conformity with the requirements of the scientific organization of labor in order to reveal and utilize reserves in labor productivity growth.

In accordance with the USSR Council of Ministers and AUCCTU decree "On Measures To Further Develop and Improve the Efficiency of the Brigade Form of labor Organization and Incentive in Industry" dated 1 December 1983, association and enterprise chiefs are obliged "to introduce into practice the systematic certification of workplaces in order to raise their technical, technological and organizational level and to improve working conditions, and on this basis to carry out a planned reduction of low-productivity and inefficient workplaces.

1.2. The main purpose of certification and rationalization of workplaces is to improve production efficiency on the basis of labor productivity growth and improve the utilization of fixed capital and material resources and manpower.

1.3. Certification of workplaces includes the following:

a) comprehensive evalution of each workplace for its conformity with normativ [standard] requirements and leading experience, in three directions:

--the technical-technological level of the workplace;
--the organizational-economic level;
--working conditions and safety equipment at the workplace;

b) clarifying from the results of the evaluation:

--workplaces that meet established requirements (these workplaces are considered certifiable);
--workplaces where these parameters can be achieved after appropriate rationalization and modernization;
--superfluous workplaces (not being used) and workplaces that it would be inefficient to modernize;

c) conducting a technical-economic analysis of the characteristics a workplace and decisionmaking on reductions, rationalization, loading or continuation of operation of a workplace; determination of directions in evaluating possibilities and establishing time periods for rationalization.

1.4. Rationalization of workplaces includes the following:

--drawing up specific organizational-technical measures aimed at implementing decisions that have been made and including them in the appropriate sections of the enterprise organizational-technical plan;
--implementation of measures that have been drawn up.

An illustrative diagram of how to conduct the work for certification and rationalization of workplaces is shown at the end of the attached appendices.

1.5. In determining the conformity of a workplace with normativ requirements use will be made of state standards, sector standards, sanitary standards and rules, the norms for technological planning, standard plans (diagrams) for labor organization at the workplace, enterprise standards, and also any normativ requirements worked out specially for a given sector.

A list of intersector normativ materials used in certification of workplaces is shown in appendix 1.

During certification there is to be mandatory consideration of leading domestic and foreign experience in the field of equipment, technology, the organization of labor and production, and improvements in working conditions and safety equipment.

1.6. Certification of workplaces is a logical development in work to issue passport documents [pasport] for production associations (or enterprises). In certification of workplaces consideration is to be given to the results of passport documents issued earlier (during compilation of the Program for Reducing Manual Labor and the Comprehensive Plan for Improving Working Conditions, Labor Safety and Sanitary-Health Measures) for manual labor and work in adverse working conditions. In turn, the results of certification will create a base for introducing essential additions to appropriate programs and plans.

In subsequent periods this work should be carried out in accordance with the time periods established and in accordance with a unified primary document.

1.7. Certification of workplaces is an integral part of work to manage labor resources, including planning, calculation and rationalization of workplaces, aimed at achieving balance between available and newly created workplaces and manpower resources and improving the occupational-skills structure of work personnel.*

1.8. Sector recommendations on the cetification of workplaces are being drawn up on the basis of existing recommendations by ministries and administrations jointly with the central trade union committees. During preparation of sector recommendations, forms for calculation and certification of workplaces should be worked out.

Specific indicators characterizing the technical-technological and organizational-economic level, and also working conditions and safety equipment at the workplace, may be clarified and supplemented taking into account the specific features of the sector.

Intersector recommendations can be used also by production associations (combines) and enterprises during compilation of the provisions for the certification of workplaces.

1.9. These recommendations are designed for conducting certification of workplaces for workers. At the same time, the principles set forth in them can be used in certification of workplaces for all categories of working people.

1.10. It is envisaged that certification as a most important means for raising production efficiency during the 12th Five-Year Plan will be successively extended to the organizational structural elements, namely brigades, sectors, shops and so forth. Proceeding from this, in 1985 the USSR State Committee for Labor and Social Problems jointly with the AUCCTU will prepare appropriate recommendations.

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* Calculation and planning for workplaces in machine building is to be done in accordance with the Standard Methodological Instructions for Planning, Calculation, Certification and Rationalization of Workplaces in Associations (Enterprises) of the Machine Building Ministries, as confirmed by the USSR Gosplan, the USSR State Committee for Labor and Social Problems and the USSR Central Statistical Administration on 3 January 1984.

2. The Workplace. Definition and Main Features of Classification.

2.1. The workplace is the zone where work is carried out, as determined on the basis of labor and other existing norms, equipped with the necessary facilities designed for labor activity by one or several operatives. A collective workplace consists of individual workplaces.

2.2. The production zone of a brigade can comprise both individual and collective workplaces. The aggregate of workplaces in a brigade should correspond with the brigade service zone, and the aggregate of brigade service zones should correspond with the boundaries of a production section, the aggregate of workplaces in a section with the boundary of the shop, and so forth.

2.3. As organizational-technical measures are implemented (the introduction of new equipment, progressive technologies, means of small-scale mechanization and scientific organization of labor), the makeup of the workplace and its boundaries, and also the total number of workplaces change.

2.4. When selecting specific indicators for evaluation, during the actual course of certification and in analysis of its results workplaces are grouped according to the following main features:

--designation of work occupation (in accordance with the Unified Wage Rates and Qualifications Guide);
--types of equipment used;
--the amount of equipment being used (single-station, multistation and multiple-unit);
--the number of work shifts;
--the degree of mobility (stationary, mobile)*

When establishing the technical-technological and organizational-economic levels and working conditions at a workplace, consideration is also given to classification features of the workplace such as degree of mechanization, working conditions, conformity with standard plans for labor organization and so forth.

3. Evaluation of the Technical-Technological Level of a Workplace.

3.1. The technical-technological level of a workplace (K_1) is evaluated according to the following criteria:

--productivity of the equipment in use ($K_{1.1}$);
--equipment conformity with requirements for output quality ($K_{1.2}$);
--utilization of equipment technological facilities ($K_{1.3}$);
--progressiveness of the technological process being used ($K_{1.4}$);
--the technological status [osnashchennost'] of the workplace ($K_{1.5.}$).

* mobile work places include those with no defined boundaries for the work zone and designed for doing work needed at different places in a shop or enterprise.

3.2. Specific indicators for the evaluation criteria listed are determined by the methodological and normative materials for sectors and enterprises, taking into account specific features, namely type of production, kinds of work and equipment used.

3.3. When evaluating the productivity of equipment being used, the following are taken into account:

--productivity of the equipment in accordance with passport documentation data;
--the actual productivity of equipment;
--the age and technical condition (suitability for repair) of equipment;
--the degree of amortization for equipment.

3.4. When evaluating equipment conformity with requirements for output quality the following are taken into account:

--the possibility of meeting the requirements for output quality in accordance with passport documentation data and the actual status of equipment;
--the availability of automatic monitoring facilities and their conformity with the requirements for output quality.

3.5 When evaluating the utilization of the technological facilities of equipment the following is taken into account:

--conformity of operating regimes of equipment with the regimes provided for in technical documentation;
--the degree to which equipment is being used in terms of capacity.

3.6. When evaluating the technological process being used the following are taken into account:

--optimality of technological operating regimes for equipment, as indicated in the technical documentation;
--progressiveness of the technological process (use of rational methods in materials forming and cutout, waste-free and low-waste technologies and so forth);
--comprehensive utilization of raw materials (or materials).

3.7. When evaluating the level of the technological status at the workplace the following are taken into account:

--the availability at the workplace of all the technological equipment [osnastka] provided for by the technical documentation;
--the technical condition of technological equipment;
--the availability of lifting and transporting facilities and means of interoperational transportation;
--provision with means of technological equipment of the required quality.

4. Evaluation of the Organizational-Economic Level of the Workplace.

4.1. The organizational-economic level of the workplace (K_2) is evaluated according to the following criteria:

--degree of rationalization in workplace planning ($K_{2.1}$);
--organizational status of the workplace ($K_{2.2}$);
--utilization of leading forms of labor organization at the workplace: use of the brigade form of labor organization and incentive, multistation (or multiple unit) handling, degree of rationalization in work at the workplace ($K_{2.3}$);
--conformity of production labor intensiveness and labor expenditure norms with progressive normatives ($K_{2.4}$);
--degree of use of the workplace ($K_{2.5}$).

4.2. When evaluating the degree of rationalization in workplace planning the following are taken into account:

--conformity of the area occupied by the workplace with the technological design norms;
--conformity of workshop planning with the standard design (diagram) for labor organization;
--insuring minimum movement of the worker both across the work zone and outside it;
--degree of rationalization in the disposition and storage of blanks (materials) and cutting and measuring equipment at the workplace.

4.3. When evaluating the organizational status of the workplace the following are taken into account:

--the availability at the workplace of all organizational equipment provided for in the standard plan (diagram) for labor organization;
--the degree of progressiveness in the design of organizational equipment;
--the technical condition of organizational equipment.

4.4. When evaluating leading forms of labor organization the following are taken into account:

--the use of multistation (multiple unit) operations;
--use of the brigade form for labor organization and its degree of rationalization (whether or not the brigade is comprehensive, a start-to-finish operation, operating under a unified contract; whether or not there is a general brigade wage with a coefficient of labor participation, and so forth);
--whether professions are combined;
--the degree of rationalization in operations at the workplace.

4.5. When evaluating conformity of production labor intensiveness and labor expenditure norms with intersector, sector and other more progressive normatives the following are checked:

--the quality of existing norms, the degree of their technical justification and the correctness of the calculation;
--conformity of actual labor intensiveness with design (or calculated) labor intensiveness.

4.6. When evaluating the degree of use of the workplace the following are taken into account:

--the number of shifts at the workplace;
--the amount of work set permanently for the workplace and the labor intensiveness of such work;
--the degree to which equipment is used (on a time basis);
--the degree to which the worker is engaged at the workplace during a shift (or cycle).

4.7. Depending on the specific features of production, indicators characterizing the organizational-economic level of the workplace can be supplemented or amended.

5. Evaluation of Working Conditions and Safety Equipment at the Workplace.

5.1. Working conditions and safety equipment at the workplace (K_3) are evaluated according to the following crtieria:

--conformity of sanitation and hygiene conditions for labor at the workplace with normativ requirements ($K_{3.1}$);
--the use of heavy physical labor ($K_{3.2}$);
--whether or not labor is monotonous ($K_{3.3}$);
--availability of individual and collective means for worker protection and conformity of such means with the labor safety standards ($K_{3.4}$);
--the status of availability of special clothing and special footwear for workers in conformity with established norms ($K_{3.5}$).

5.2. When evaluating the sanitation and hygiene conditions at the workplace (climatic conditions, amount of dust, amount of gases, degree of illumination and so forth) it is essential to be guided by the sanitation norms and rules (in accordance with maximum permissible concentrations and maximum permissible levels).

5.3. When evaluating heavy physical labor and monotonous labor it is essential to be guided by the "Standard Methodology for Determination of the Severity of Manual Physical and Monotonous Labor in Sectors of the National Economy" (as confirmed by the USSR State Committee for Labor and Social Problems with the agreement of the USSR Ministry of Health and the AUCCTU on 22 September 1982), and also by the "Norms for Maximum Permissible Workloads for Women in Lifting and Carrying by Hand" (as confirmed by the 27 January 1982 USSR State Committee for Labor and Social Problems and AUCCTU decree No 22/P-1).

5.4. When evaluating the availability of individual and collective means for worker protection and the conformity of such means with the labor safety standards the following are taken into account:

--the availability at the workplace of guard and stop devices and danger alarms;
--the use of identifying colors and warning signs;
--the availability (when required) of remote controls;

--the maintenance of electrical, fire and explosion safety depending on the specific features of equipment and the conditions in which it is operated;
--the technical condition of individual and collective means of protection.

5.5. When evaluating the status of availability of special clothing and special footwear for workers in conformity with established norms the following are taken into account:

--conformity of the amount and nomenclature of special clothing and special footwear with established norms;
--the technical status (good working condition, intact condition, cleanliness) of special clothing and special footwear.

6. Analysis of Results from Evaluation of Workplaces and Decisionmaking on Their Further Use.

6.1. During the course of certification of workplaces they are evaluated in accordance with all criteria listed in paragraphs 3.1., 4.1. and 5.1.; one of the following decisions is made on each workplace:

--the workplace corresponds to the normativ level;
--the workplace does not correspond to the normativ level but can be made to do so;
--the workplace does not correspond to the normativ level and cannot be made to do so.

6.2. In order to achieve an integrated, quantitative evaluation of the level of the workplace in general and in terms of individual groups of criteria it is recommended that the following method be used. Depending on the degree of conformity of the workplace with progressive decisions (normativ requirements) for each of the criteria, an evaluation (coefficient) is derived as follows:

--a workplace that corresponds to the normativ level is rated at "1.0";
--a workplace that does not correspond but can be brought up to the normativ level is rated at "0.5";
--a workplace that does not correspond and cannot be brought up to the normativ level is rated at "0".

6.3. The final evaluation of each group of criteria (technical-technological level, organizational-economic level, working conditions and safety equipment) is determined as a mean arithmetic value for the evaluations for the individual criteria, that is,

$$K_1 = \frac{K_{1.1} + K_{1.2} + K_{1.3} + K_{1.4} + K_{1.5}}{5} \text{ and so forth}$$

6.4. The integrated (overall) evaluation of the organizational-technical level of the workplace as a whole is determined as a mean arithmetic value for the three groups of criteria:

$$K_{total} = \frac{K_1 + K_2 + K_3}{3}$$

6.5. The decision on certification or noncertification of a workplace is made on the basis of the evaluatiion of the organizational-technical level.

A workplace is considered certifiable when the following conditions are observed:

--the complete absence of evaluations (coefficients) of "0";
--no more than one evaluation of "0.5" in each group;
--each of the groups and the integrated indicator have a value of at least "0.9".

Workplaces for which at least one of these conditions is not observed are considered uncertifiable.

As a rule, those workplaces whose organizational-technical level is evaluated lower than "0.5" should be eliminated.

6.6. At the final stage of certification, in order to make substantiated decisions on the further use of workplaces, a technical-economic analysis is made, during the course of which the following is done:

--indirect results from the evaluation of workplaces are reviewed;
--on the basis of calculations made during confirmation of plans and certification results, a determination is made of superfluous workplaces and workplaces that can be rationalized or brought up to proper load;
--an analysis is made of the cost of workplaces and the expenditures required to rationalize them;
--a determination is made of technical, material and financial possibilities at the enterprise (or shop) in order to rationalize and modernize workplaces (in terms of time periods and stages).

6.7. On the basis of the analysis for each workplace one of the following decisions is made:

a) for noncertified workplaces:

--reduction, passing operations from a given workplace to a certified workplace. In this case measures are drawn up to sell equipment or transfer it to other subdivisions, and to retrain and place freed-up workers;
--rationalization, implementing measures to improve working conditions, reduce the use of heavy physical and manual labor and improve the organizational-technical level of the workplace;

b) for certified workplaces:

--bringing the workload up to capacity by assigning to the workplace operations done previously at workplaces that have been eliminated;
--rationalization in order to bring all criteria up to the normativ level;
--continuation of operation without introducing changes.

6.9. [as published; paragraph "6.8" is omitted from sequence--ed] Measures drawn up to reduce and rationalize workplaces are included in the organizational-technical plan for the enterprise. When necessary the plan includes measures to create new workplaces corresponding to progressive decisions (normativ requirements).

Summary data on the planned number of reductions and rationalizations of workplaces, the number of freed-up workers and the anticipated saving are included in the collective agreement (section 3 "Introducing the Achievements of Science and Technology, Leading Experience and the Scientific Organization of Labor").

7. Organization of Work To Carry Out Certification and Rationalization of Workplaces*

7.1. Certification and rationalization of workplaces make up an inseparable part of the overall system of managing the technical, economic and social development of the enterprise.

7.2. Certification of workplaces at the enterprise is preceded by work to calculate [the number of] workplaces.

As a rule certification of workplaces is done once a year. Specific time periods for conducting certification are established by the enterprise manager.**

Simultaneously with the certification of workplaces it is advisable to analyze conformity between worker skills and the complexity of the work that they are doing. The results from analysis are later used to draw up plans to improve the skills of workers and train new workers.

7.3. It is recommended that in shops in main production facilities the chief technologist's section and the labor and health safety section be responsible for carrying out work on workplace certification and rationalization, while in auxiliary production facilities the corresponding functional sections be responsible (the chief mechanic's section, the chief power engineer's section, the chief metallurgist's section, the chief specialist's section, the capital construction section and so forth).

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* Work experience and the organizational documentation used for certification of workplaces at the Dnepropetrovsk Combine Plant imeni K.Ye. Voroshilov and the Arsenal Plant are shown in appendices IV and V. [not published here--ed]

** In sector recommendations, time periods for conducting certification can be made more precise. Notwithstanding, certification of workplaces should be carried out at least twice du ing each five-year period.

7.4. Responsibility for achieving the appropriate criteria (indicators) covered in sections 3 through 5 is assigned for each functional subdivision. An example of the allocation of responsibility between subdivisions in a machine building enterprise is shown in appendix II.

7.5. Preparatory steps are taken before the start of workplace certification at an enterprise. These include explanatory work, the organization of training for workers directly participating in the certification procedure, insuring that the enterprise subdivisions have the necessary normativ-methodological materials and documentation and forms, working out a system of moral and material incentive for work on workplace certification and rationalization and so forth. The preparatory stage culminates in the publication of the order for the enterprise, in which time periods for conducting the certification in the subdivisions and for the enterprise as whole are laid down together with the composition of the plant certification commission, and the responsibility of the functional subdivisions for the time periods and the quality of all work carried out are determined.

7.6. As a rule the general plant certification commission is headed by the chief engineer. The commission is made up the leaders of the functional subdivisions and representatives of the party and trade union organizations, the council of brigade leaders, the scientific and technical section, the All-Union Society of Inventors and Rationalizers and so forth. The general plant certification commission is a permanent organ of management at an enterprise.

7.7. As a rule shop certification commissions are headed by the shop chiefs. The commission includes foremen, technologists, economists, normativ fixers, representatives of the party and trade union organizations, brigade leaders, and leading workers. With the functional sections of a plant, the composition of the shop commissions includes the required number of engineering-technical workers, released from their main duties for the certification period. The composition of the shop certification commissions and the time periods for conducting workplace certification, and also the timetables for carrying out certification in the sections (or departments) are confirmed by instructions from the shop chiefs.

7.8. The shop certification commission:

--compares the actual values for the indicators characterizing the organizational-technical level of workplaces with the normativ values, and records the evaluation of conformity (or lack of conformity) of certified indicators in a document [akt] of workplace certification (appendix III);
--makes the decision on the certification (or noncertification) of the workplace;
--makes the technical-economic analysis of the characteristics of the workplace and enacts and records in the workplace certificate the certification decision on its further utilization;
--draws up proposals on worker skill improvement and worker training for second and combined professions;

--passes the following to the general plant certification commission: the workplace certificates signed by all members of the shop certification commission; the technical-economic calculations confirming the feasibility (or infeasibility) of reducing the number of workplaces; a draft plan for measures to raise the organizational-technical level of noncertified workplaces and proposals on time periods for a second certification procedure, a draft plan for reducing the number of workplaces and proposals for creating new workplaces in line with progressive decisions, and a list of workers recommended for inclusion in the plan for skill improvement at enterprise production-technical courses.

7.9. The general plant certification commission:

--reviews the workplace certificates and the technical-economic calculations and makes the final decision on the further utilization of workplaces;
--reviews the proposals from the shop certification commissions for raising the organizational-technical level of workplaces and assigns the functional subdivisions to draw up specific measures (in the appropriate directions) to include them in the plan for improving production efficiency at the association (or enterprise) and in the plan for worker vocational training in production;
--establishes the time periods for repeat certification of noncertified workplaces;
--organizes during the period between certifications of workplaces via the appropriate functional subdivisions of the enterprise a systematic clarification and study of leading experience and the development on this basis of enterprise normativs and standards.

7.10. The general plant and shop certification commissions insure the broad participation of leading production workers, engineering-technical workers, and efficiency experts and inventors in the certification procedure and the rationalization and reduction of inefficient workplaces.

In order to develop the creative initiative of workers and specialists in this direction it is advisable to set up creative groups and periodically conduct review-competitions for better handling of work on workplace certification.

Enterprise administrations and trade union committees organize work to include in personal creative plans pledges to raise the organizational-economic level of workplaces in terms of engineering aspects, and to reduce the numbers of inefficient workplaces and completely free-up peronnel.

7.11. Taking into account the labor intensiveness of workplace certification work, it is recommended that wher such work is being carried out the use of means of mechanization and computers should be insured, together with the compilation of special programs for the automatic processing of certification results.

7.12. Depending on the certification results, an order agreed with the trade committee is issued for the enterprise. The order establishes the following:

--the total number of workplaces to be eliminated;
--those responsible for implementing measures to rationalize workplaces;
--measures to retrain and utilize workers freed up in connection with the elimination and rationalization of workplaces;
--measures to encourage workers to participate actively in carrying out this work.

7.13. Control over time periods for the drawing up and implementation of measures to rationalize (or reduce) workplaces is exercised by the enterprise chief engineer. Changes in the organizational-technical plan are made in accordance with established procedure.

A measure is considered implemented only after confirmation of the official document on its introduction.

7.14. Material incentive for enterprise workers for drawing up and introducing measures on workplace certification and rationalization, reducing the number of inefficient workplaces and completely freeing up numbers of personnel is effected in accordance with existing provisions on bonuses for new equipment, as for the development and introduction of efficient methods for production organization and the scientific organization of labor.

7.15. Special provisions on bonuses for these workers paid from the material incentive fund may be drawn up at associations (or enterprises).

APPENDICES

Appendix I. List of the Main Normativ Documents Used in Workplace Certification

	Designation of document	Confirmed by. Date.
1.	"Labor Safety Standards System (SSBT)"	USSR State Committee for Standards
2.	"Standards of the 'Man-Machine' System"	USSR State Committee for Standards
3.	"Intersector Requirements and Normativ Materials on the Scientific Organization of Labor To Be Considered in the Planning of New Enterprises and Reconstruction of Existing Enterprises and the Development of Technological Processes and Equipment"	USSR State Committee for Labor and Social Problems USSR State Committee for Science and Technology USSR Gosstroy AUCCTU 1977
4.	"Standard Methodology for Determining the Severity of Manual Physical and Monotonous Labor in Sectors of the National Economy"	USSR State Committee for Labor and Social Problems 22 September 1982
5.	"Norms for Maximum Permissible Loads for Women in Lifting and Moving Loads Manually"	USSR State Committee for Labor and Social Problems AUCCTU 27 January 1982

6. "List of Recommended Existing Intersector Norms and Normativs on Labor, as of 1 January 1984" (Central Office of Labor Standardization, Moscow, 1984)

7. "Unified Rate-and-Skill Handbook for Work and Occupations for Workers in the National Economy"

8. "Catalogue of Standard Plans for the Organization of Labor at Workplaces and in Sections and Shops in Industrial Enterprises" (Scientific Research Institute of Labor, Moscow, 1980)

9. "Methodological Recommendations for Development, Confirmation and Introduction of Standard Plans for the Organization of Labor at Workplaces in the Mass Occupations, and for Engineering-Technical Workers and Employees in Labor Institutes" Moscow, 1974.

10. "Methodological Instructions on the Development and Introduction of Standard Plans for Labor Organization in Production Sections and in Shops and Scientific Institutes of Labor" Moscow, 1978.

11. "Handbook on Labor Safety" 4 Volumes. Leningrad, "Sudostroyeniye" publishing house, 1973-1975

12. "Construction Standards and Rules" Part II, section A, chapter 9 "Artificial Lighting. Design Standards" (Sanitation Standards and Rules P-4-79) — USSR Gosstroy 27 June 1979

13. "Instructions on Decorating Colors in Interiors of Production Premises at Industrial Enterprises" (Construction Standard 181-70) — USSR Gosstroy 1970

14. "Sanitation Rules in Metal Welding and Cutting" No 725-67 — Deputy chief sanitary physician of the USSR 17 December 1967

15. "Sanitation Rules in the Organization of Technological Processes and Hygiene Requirements for Production Equipment" No 1042-73 — Chief Sanitary Physician of the USSR 4 April 1973

16.	"Hygiene Standards for Maximum Noise Pressure and Noise Level at Workplaces" No 1004-74	USSR Ministry of Health
17.	"Rules for Safety Devices in the Operation of Cargo Cranes"	USSR State Committee for Supervision of Safe Working Practices in Industry and for Mine Supervision 30 December 1969
18.	"All-Union Standards for Technological Design of Mechanical-Machining and Assembly Shops at Enterprises of the Instrument Building and Metalworking Industries"	Ministry of the Machine Tool and Tool Building Industry with the agreement of the USSR Gosstroy
19.	"Rules for Safety Equipment and Production Sanitation in Cold Working of Metals in the Machine Tool Industry"	Central Committee of the Machine Building Workers Trade Union 19 November 1958
20.	"Rules for Safety Equipment and Production Sanitation in Foundry Production in the Machine Tool Industry" Part 6	Presidium of the Central Committee of the Machine Building Workers Trade Union 9 February 1958
21.	"Rules for Safety Equipment and Production Sanitation in Forging and Pressing Production" Parts 3, 4	Central Committee of the Machine Building Workers Trade Union 19 March 1959
22.	"Rules for Safety Equipment and Production Sanitation in Hot Metalworking"	Central Committee of the Machine Building Workers Trade Union 6 July 1960
23.	"Rules for Safety Equipment and Production Sanitation in the Production of Metal Coatings" Section 2.6	Central Committee of the Machine Building Workers Trade Union 8 June 1960
24.	"Rules for Safety Equipment and Production Sanitation in Electrowelding Work" Part 2	Central Committee of the Machine Building Workers Trade Union 8 January 1960
25.	"Rules for Safety Equipment in Work with High-Frequency Installations in Machine Building	Central Committee of the Machine Building Workers Trade Union 29 September 1958
26.	"Methodological Instructions for Improving Working Conditions in Production and When Using Atmospheric Corrosion Inhibitors on Metals and Inhibited Paper" No 1321-75	Deputy chief sanitary physician of the USSR 10 July 1975
27.	"Evaluation of the Severity of Labor and Its Physiological Standardization (Methodological Recommendations)"	USSR Ministry of Health 12 November 1975

Appendix II. Example of Allocation of Responsibility Among the Functional Subdivisions of a Machine Building Enterprise for Criteria (Indicators) in Evaluation.

[The following abbreviations are used in this appendix:

OGM = chief mechanic's section
OGT = chief technologist's section
OGMet = chief metallurgist's section
OGS = chief specialist's section
BIKh = office of tool supply
ONOTiU = department of scientific organization of labor and management
OMA = department of mechanization and automation
OOTiZ = work safety and health department
PDO = production dispatch department
OTB = safety equipment department]

Criterion (Indicator)		Subdivision	
Designation	Arbitrary Sign	Responsibility for level of indicator	Commission material presented by
1. Productivity of equipment in use	$K_{1.1}$	OGM	Shop administration
2. Conformity of equipment with requirements for output quality	$K_{1.2}$	OGM, OGT	Shop administration
3. Use of technological possibilities of equipment	$K_{1.3}$	OGT	OGM
4. Progressiveness of the technological process in use	$K_{1.4}$	OGT, OGMet, OGS	Shop administration
5. Technological status of workplace	$K_{1.5}$	OGT, BIKh	Shop administration
6. Degree of rationalization in workplace planning	$K_{2.1}$	OGT, ONOTiU	ONOTiU
7. Organizational status of workplace	$K_{2.2}$	OMA, OGM, ONOTiU	ONOTiU
8. Utilization of leading forms of labor organization at workplace	$K_{2.3}$	Shop administration ONOTiU	OOTiZ ONOTiU

9.	Conformity of production labor intensiveness and labor expenditure norms with progressive normativs	$K_{2.4}$	OOTiZ	Shop administration
10.	Degree of use of the workplace	$K_{2.5}$	Shop administration	PDO, OOTiZ
11.	Conformity of sanitation and hygiene conditions for labor with normativ requirements	$K_{3.1}$	OTB, OMA	Shop administration
12.	Use of heavy physical labor	$K_{3.2}$	OTB, OMA	Shop administration
13.	Whether or not labor is monotonous	$K_{3.3}$	OTB, OMA	Shop administration
14.	Availability of individual and collective means for worker safety and conformity of such means with standards	$K_{3.4}$	OTB, OMA, OGM	Shop administration
15.	Status of availability of special clothing and footwear for workers in conformity with established norms	$K_{3.5}$	OTB	Shop administration

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Appendix III. Official Document [Akt] for Workplace Certification

(reverse side)

EVALUATION OF WORKPLACE IN CONFORMITY WITH CERTIFICATION CRITERIA

Designation of criterion	Arbitrary Sign	Evaluation	Time Period for Achieving Normativ
1. Productivity of equipment in use	$K_{1.1}$		
2. Conformity of equipment with requirements for output quality	$K_{1.2}$		
3. Use of technological possibilities of equipment	$K_{1.3}$		

Appendix III (cont)

4. Progressiveness of the technological process in use $K_{1.4}$

5. Technological status of workplace $K_{1.5}$

$$K_1 - \frac{K_{1.1} + K_{1.2} + K_{1.3} + K_{1.4} + K_{1.5}}{5} \quad X$$

---

6. Degree of rationalization in workplace planning $K_{2.1}$

7. Organizational status of workplace $K_{2.2}$

8. Progressiveness of labor organization at workplace $K_{2.3}$

9. Conformity of production labor intensiveness and labor expenditure norms with progressive normativs $K_{2.4}$

10. Degree of use of workplace $K_{2.5}$

$$K_2 - \frac{K_{2.1} + K_{2.2} + K_{2.3} + K_{2.4} + K_{2.5}}{5} \quad X$$

---

11. Conformity of sanitation and hygiene conditions for labor with normativ requirements $K_{3.1}$

12. Use of heavy physical labor $K_{3.2}$

13. Whether or not labor is monotonous $K_{3.3}$

14. Availability of individual and collective means for worker safety and conformity of such means with standards $K_{3.4}$

Appendix III (cont)

15. Status of availability of special clothing and footwear in conformity with established norms $K_{3.5}$

$$K_3 - \frac{K_{3.1} + K_{3.2} + K_{3.3} + K_{3.4} + K_{3.5}}{5} \quad X$$

$$K_{total} - \frac{K_1 + K_2 + K_3}{3} \quad X$$

[end of reverse side]

Appendix III (front side of the official document)

Enterprise _____

Confirmed by
Chief engineer

_____

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OFFICIAL DOCUMENT
OF CERTIFICATION OF A WORKPLACE
(specimen form)

_____
(designation and number)

Shop _____ Section _____

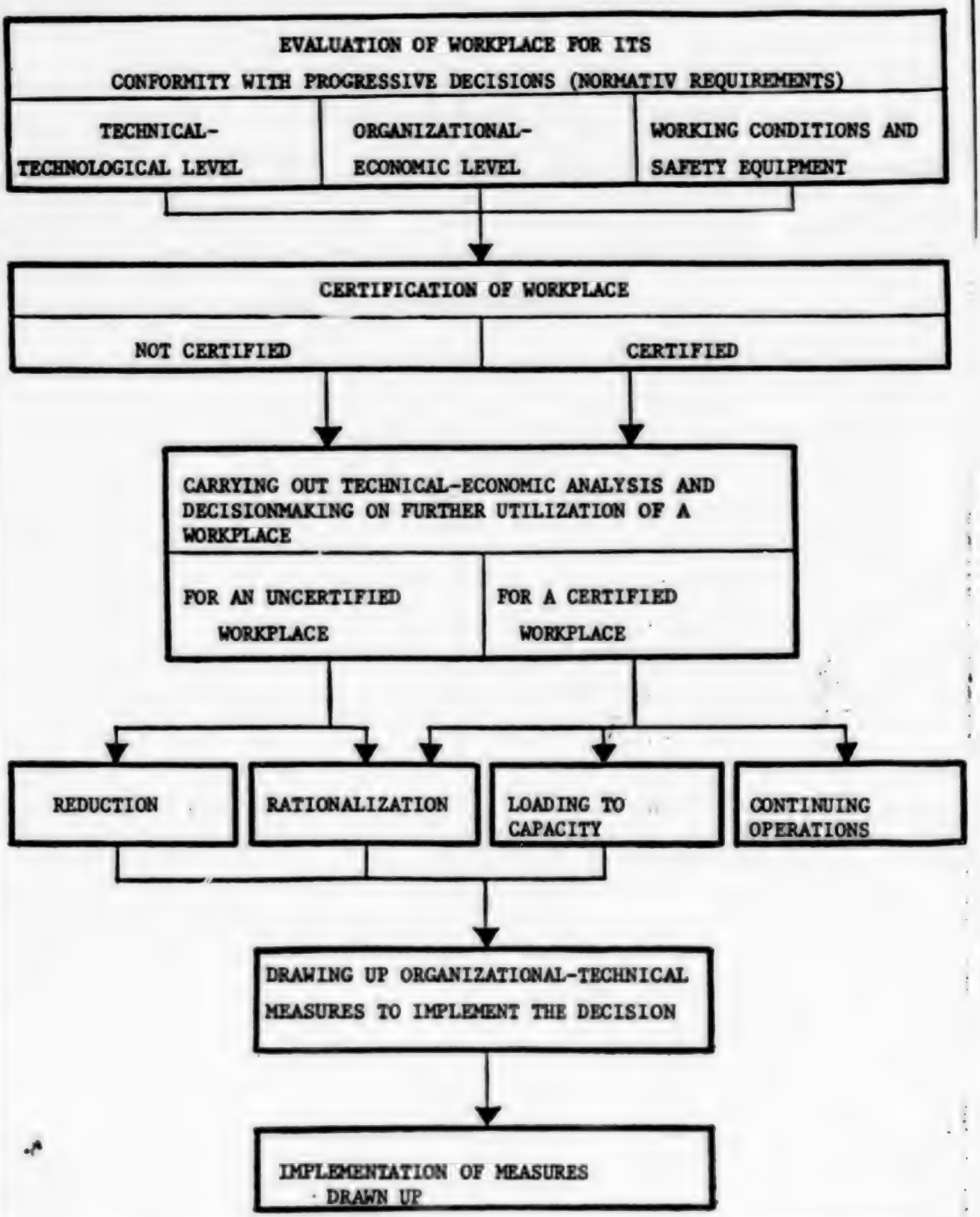
Brigade _____ Number of workers employed at the workplace: total _____ including, by shifts:
1st shift _____ 2d shift _____ 3d shift _____ 4th shift _____

DECISION OF THE SHOP CERTIFICATION COMMISSION _____
_____
(certified, not certified --decision is made on the basis of data presented on reverse)

CONCLUSIONS AND PROPOSALS OF THE SHOP CERTIFICATION COMMISSION ON THE FURTHER UTILIZATION OF THE WORKPLACE AND ITS WORKLOAD: _____
(here is written the decision

_____
on reduction, rationalization, bringing workload up to capacity or continuance without changes)

DIAGRAM OF WORKPLACE CERTIFICATION AND RATIONALIZATION AT AN ENTERPRISE



Appendix III (cont)

Signatures of commission members:

[end of front side]

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LABOR TRAINING UNDER INTENSIFICATION DRIVE DESCRIBED

Moscow SOTSIALISTICHESKIY TRUD in Russian No 5, May 84 pp 74-81

[Article by M. Yendovitskiy, chairman, Goskomtrud (State Committe of the USSR Council of Ministers on Problems of Labor and Wages) Kirghiz SSR: "Training and Improvement of Workers' Qualifications During the Intensification of the Economy"]

[Text] This year marks the 60th anniversary of the formation of the KiSSR and the Kirghiz Communist Party. During that short historical period, powerful production forces, based on large-scale machine industry and industrial production and the socialistic transformations in agriculture, have been developed in the republic.

Modern machinery and progressive technology are capable of giving a high national economic effect only by combining them with a highly skilled work force. This demands continuous improvement of specialists' training and the upgrading of their qualifications. This task was resolved, first of all, by means of intensive development of the vocational-technical education system. Thanks to the measures adopted by the Central Committee of the Kirghiz Communist Party and the KiSSR Council of Ministers, for the 10th and three years of the 11th five-year plans, the number of vocational-technical higher schools in the republic grew from 70 to 115, or by a factor of 1.6. In all 62,000 young men and women are studying 230 professions in them. Annually, nearly 34,000 young qualified workers, graduates of the vocational-technical schools, enter industry. In many fields and enterprises, they constutute the nucleus of the workers' collectives.

But the national economy's demand for workers is so great that, in addition to the vocational-technical higher schools, specialists are trained directly in the enterprises. Thus far in the 11th Five-Year Plan, significant work has been done in the republic for broadening the training of qualified specialists in industry. The bases for this were the provisions of the decree of the CPSU Central Committee, and the USSR Council of Ministers, "On Measures for the Further Improvement of Training and the Upgrading of Workers' Qualifications in Industry," and the pertinent documents of the of the Kirghiz Communist Party Central Committee and the KiSSR Council of Ministers, which were directed towards the further improvement of worker-specialists' training in the republic in 1981-1985. The execution of the instructions contained in

these documents, occupied an important place in the work of the republic Goskomtrud, the ministries and departments and enterprises of Union subordination. On the whole, the task of providing the republic's plants, factories and construction jobs with a skilled work force was solved as a result of the implementaion of jointly-worked-out measures. In 1983 alone, 84,000 workers and kolkhoz workers were trained directly in industry as compared to 70,000 in 1980, or, 19 percent more. About 80,000 workers raised their qualifications by industrial and technical courses and more than 190,000 in the economic education system. Thus, annually, four workers out of ten either improve their qualification or acquire it.

The increase in the scale of workers' training required that the State Committee on Labor and Wages and many economic leaders introduce a corrective and effective structure for the control of the training and the upgrading of specialists' qualifications. In certain ministries and departments, it was necessary to strengthen existing technical education bureaus and sections and, in others, to introduce an additional staff of workers. Thus, the Ministry of the Construction Materials Industry created an independent four-man specialist training section and in 15 enterprises, designated individuals to be responsible for this work. In the republic's Ministry of Local Industry, a group was organized under the TsKTB [Central Technical-Design Bureau] for the systematic guidance of workers' vocational training. In the Kirghiz worsted cloth group of enterprises, a training and production department was opened for industrial training of PTU [Professional and Technical Higher School students and also for workers of the enterprise's training center, etc.

The majority of ministries and departments confirmed the specialized status concerning workers' vocational training in production and formulated standards for the development of a training and material base and standarized the number of workers involved in specialist training. The strengthening of the training and material base for specialist training in industry is being emphasized. Today it includes 15 training centers, 131 training posts and 67 workers' training schools.

But the work, I dare say, is not only so much of the numbers of training subunits. In the course of fulfilling the above- mentioned CPSU Central Committee and the USSR Council of Ministers' decree, the training and material base for the workers'vocational training, was improved in a major way and rebuilt. Thus, for example, in the republic Ministry of Construction such a base consists of 73 class rooms and study [rooms] capable of accommodating 2100 students and is technically and materially equiped for in accordance with the prescribed norms and requirements. The trainees are provided with more than 2,700 individual training mock-ups, assemblies, trainers and modern programming devices, and more than 17,000 copy books. From this model, one can calculate the system for workers' professional training at the Frunze Instrument Building Plant imeni 50-letiya Kirgizskoy SSR, which includes 11 class rooms, 5 production and training centers for 162 students. Attached to the enterprise are a professional and technical higher school and also a machine-building tekhnikum which are component units of a common training and production complex. Eighty of the enterprise's best engineer-technical workers conduct classes for the training and the upgrading of qualifications of workers of the most common professions and more than 300 leading workers

are masters of industrial training. Having paid much attention to workers' shift training, the plant was able to achieve high end results and to implement successfully the system "Progressive concept--for production," which is well known far beyond the borders of the republic. This made it possible, at a time of a relatively stable work force, to double, during the five-year plan, the volume of industrial production. The economic effect for 1983 alone, from the implementation of 5,265 suggestions of participants in the creative search, amounted to 1.5 million rubles.

From the beginning of the 11th Five-Year Plan, much was done for the development of the training and material base in the republic's Ministry of Automotive Transportation and Highways, Ministry of Public Housing, in the State Committee for Agriculture Machinery and in a number of enterprises of Union subordination. They developed large-scale training centers, which are selfsupporting. They have their own teachers' council, training classes and laboratories, dormitories and sport complexes. In the automotive training center, for example, 8,000 new workers are trained annually.

As a rule, in the republic, training course centers are developed which permit the concentration of forces and resources. This helps to organize better the training and systematic industrial and educational work, strengthen the cooperation of the training and pedagogical collectives and mutual aid in an inter-sector context. The latter is extremely necessary because, in the republic, many small enterprises, with from 150200 workers, are incapable of developing a modern training and material base and sometimes it is even impossible to recruit a group of students (especialy for the professions with small numbers). Here, the largest-scale enterprises and organizations must help. Thus, the geology department conducts a training course for compressor machinists for a sugar refinery and the training center of the State Committee for Agriculture Machinery trains drivers of the service organizations.

In the large-scale training centers, there is great possibility for the wide application of progressive training methods. Here programming devices are made use of for supervising the students' instruction, industrial problem-solving is practiced and reports are presented for critical discussion, etc. It is easier for engineering and pedagogical workers to improve their mastery and to find new work forms. Here is but one example. Over a period of years, the industrial training detachment of the State Committee for Agriculture Machinery has been experiencing difficulty in recruiting students. And it is understood: people from the villages come to class reluctantly if this disrupts work, especially in the summertime. Then, they organized 19 mobile training classes, using the PAZ-672 autobus. They began to train the milking machine operators and the machine operators of the cattle-breeding firm in the Chuyskiy valley directly on the farms, and even more, up to 1,000 people per year. As a result, there was a significant increase in the number of masters of machine milking first-class and many graduates became winners of competitions and leading workers of industry.

The two-year, All-Union review of workers' vocational training in industry, conducted in 1981-1982, in which practically all the republic's collectives participated, promoted the improvement in the work of personnel training. Nine of these became its front-rank workers and were awarded diplomas by the

AUCCTU, USSR State Committee on Vocational Education and the USSR State Committee for Labor and Wages.

Positive improvements in the training of new specialists took place from the beginning of the five-year plan. The vocational orientation of the students of the schools providing general education became more single-minded, a network of inter-school training and production training centers quickly grew where young men and women were taught the most common working professions. The number of workers' places, being developed on the basis of the scientific organization of labor, is being increased. Since the November (1982) plenum of the CPSU Central Committee, much has been done to strengthen labor discipline, to reduce the fluctuation of personnel and to stabilize the workers' collectives. Practice suggests that it is possible to develop an excellent training and material base and to organize training and methodological work in accordance with the latest recommendations of pedagogical science but, if the conditions for retaining people are not developed, then it is all a futile expenditure of forces and resources.

While seeking to keep what had been attained, the republic's State Committee on Labor and Wages, last year, addressed a proposal to the Presidium of the KiSSR Academy of Sciences, to expand scientific research in the area of labor conditions and to make a careful study of the factors affecting man's optimal capacity for work in various jobs. It was supported, and this year three of the republic's large-scale enterprises concluded agreements with the Institute of Physiology and Experimental High Altitude Pathology of the KiSSR Academy of Sciences for the conduct of scientific investigative work on labor-condition problems. Carrying out similar arrangements are promoting the development of a more favorable situation in industry. The main results of this work are still in the future, but even today, there are already positive changes. In particular, the fluctuation of personnel in 1983 alone, in the republic's industry, has decreased by 17 percent, in construction by 23.4 percent and in automotive transport, by 9.4 percent.

In the republic ministries and departments greater attention began to be paid to the raising of pedagogical qualifications of the 8,000 teams of workers engaged in the training and education of specialists in industry. Last year, the committee for vocational technical education, with the participation of the KiSSR State Committee on Labor and Wages and Ministry of Higher Education, approved a program for raising qualifications. At the same time, there were expounded in it the traditional thematic treatment of the question of the scientific organization of labor, the methods of industrial and technical training, presentday requirements for the substance, forms and methods of teaching and educational work, the psychology of labor, the pedagogy of labor, and the principles of a systematic approach to the training of workers. One hundred people, engaged in specialist training, completed the republic's advanced training courses for ITR [Engineering and Technical Worker.]

Although the scale of this work is gradually being expanded, the major share of engineer and pedagogical workers will be trained in the immediate future. With regard to this, at the conference of the Labor Council, part of the republic's State Committee on Labor, a resolution was passed which obligated all workers of ministries, departments, enterprises and organizations, engaged

in workers' theoretical and industrial training, to prepare themselves individually and to pass an examination at the pedagogical minimum for the commissions of the training and methodology councils under the large-scale training centers. The KiSSR State Committee of Vocational Education was instructed to develop a program for the pedagogical minimum and a procedure for verifying the accomplishments in the commissions. Additionally, in two enterprise training centers, and also in the republic training and methodology study center of the KiSSR State Committee on Professional Education, permanent operating consultation posts were created for those who are engaged in training workers in industry.

In Kirghizia, nastavnichestvo quickly developed. This is one of the effective forms for the professional training of young workers and for their labor and moral upbringing. During the next five years, mentors for youth grew from 27,000 to 45,000. More thousands of plant and shop councils of mentors and also veterans of industry are passing on to the young the secrets of workmanship and educating them in the best traditions of the labor collectives.

But even here, a few problems are still not resolved. The majority of the mentors, while masters of high class in their own professions, do not have the necessary training in questions of workers' pedagogy, psychology and sociology. As a result, they are deficient in their knowledge of the propensities, interests and inquiries of their wards, and, at times, do not know how to exert effective influence on them. It is sufficient to note that more than half of the slackers and other violators of labor discipline in the enterprises and organizations are youth. Among them are those who have mentors. Seven thousand piece workers, who did not fulfill the production norms in the republic's industry were, on the whole, young workers.

In short, mass-pedagogical compulsory education for mentors is needed. But the difficulties in this matter are manifold. For example, there are 1,000 mentors in the farm machinery plant imeni M. V. Frunze. The council responsible for the systematic leadership of their work, in the past year, searched a long time for specialists to conduct a series of studies and, for this purpose, turned to a number of ministries, the Znaniye [Knowledge] Society, and the Academy of Sciences. However, the searches remained unsuccessful. This year marks the 20th year of apprenticeships in the country, but, in its leadership, there are still many flaws. There is an insufficiency of systematic directives, positions, instructions and scientifically-based management of the given problem. Further improvement is required in the practice of self-government and a new type of brigade where apprenticeships will become, essentially, the collective form.

Regretably, the State Committee on Labor and Wages still does not adequately synthesize and disseminate the latest advances in training specialists in the economic sectors of the republic. Shortcomings exist in providing specialists with professional instruction in the agro-industrial complex, particularly within the republic's Ministry of Agriculture. For that reason, year after year, our goals for training workers are not being met, and we remain without a modern, well-equipped teaching facility.

The Ministry of Agriculture is simply incapable of developing a close working relationship with the educational system used to train specialists in the State Committee for Agriculture Machinery. In terms of its equipment and its fully-staffed engineering faculty, it is rated as one of the finest in the republic. Kolkhozes and sovkhozes are reluctant to release their people from the production line and send them for instruction to the state committee's training centers and their affiliates even though the latter could absorb a 1.5-2-fold increase in the size of the student body. This, we are told, is because the republic is consistently short of some 10,000 to 14,000 tractor operators and machinists during harvest time. Many of the economic enterprises in the Osh and Issyk-Kul Oblasts have reached 60-75 percent of their staffing requirements for machine operators. The branch training network for agricultural production specialists is being slowly revamped to address the requirements of the Food-production Program.

The ineffective individual form of instruction (averaging 40 percent of the total instruction) still holds sway, not only in the agro-industrial complex, but in other sectors of the republic's economy as well. Thus, in the Ministry of Consumer Industry it accounts for 77 percent [of all instruction] and in the Ministry of Local Industry, for more than 90 percent. Consequently, the quality of specialist training is diminished.

Negative consequences also stem from the fact that, over many decades, the approach to training production specialists was focused on achieving quantitative indices and was evaluated in terms of the size of the student body. This is discernable today as well. For example, within the republic, the number of workers being trained for new professions and increasing their qualifications is growing at a rate three times faster than the national income and labor productivity. Yet, even though the number of trainees is increasing, the quality of the instruction provided does not always meet today's requirements.

Many enterprises are still not giving adequate attention to improving the material base of instruction or to introducing new, effective teaching methods. As a result, we often encounter situations in which workers' qualifications are lower than those required for the assignments they are performing. Thus, while the average rating for work assignments at the Kirghiz Electric Motor factory was set at 3.3, the average performance level of workers reached 2.9. Comparable figures for the Heavy Electrical Machinery Factory were 3.97 and 3.54, respectfully, while those for quality control and measuring instruments reached 3.5 and 3. The lack of qualified specialists results not only in a decline in product quality, but in great material and financial losses as well. Data from the republic's State Committee on Labor and Wages show that nearly 80 percent of production waste stems from workers lacking proper qualifications, and more than half of the excessive use of raw materials, fuel and energy resources is attributable to inadequate training of personnel. Moreover, failure to achieve norms of production and the low quality of output, are a direct consequence of insufficient knowledge, ability and experience of the work force. State goods lying in warehouses without market outlets are primarily generated at those enterprises where specialist training is poor.

Today's worker must have a sound knowledge of theory and practical experience. He must be able to work with different types of equipment and must be cross-trained in several fields. These requirements are reflected in modern labor organization units such as the brigade which operates as a single work detail. Currently in the republic, slightly more than 2 percent of the labor force is being cross-trained in a second field. The same number of individuals are attending schools to study advanced methods and approaches to labor. This is significantly below the national average. First and foremost, this is caused by many economic leaders who underestimate the role of qualified specialists. As a result, there is a decline in the number of workers who are required to complete a training course for a particular profession and raise their qualifications. In the various ministries within the republic, plans for professional training are not always coordinated with efforts to increase labor productivity or with plans to introduce new technology and a scientific approach to labor organization. The planning process does not make use of balanced calculations in determining the demand for a qualified work force. The professionally-qualified contingent of specialists is not being carefully studied.

At the same time, a certain and, as yet, rather significant portion of the workers is not concerned about raising their level of professional competence and displays a passive attitude toward formal studies. The motivation for such behavior is typical: "We're already earning a decent wage"; "What's the point of studying? After the courses are over, very few of us will get a higher grade or better salary." To be sure, promotions often are not linked to material and moral incentives and professional advancement for the worker. Consequently, interest in getting a promotion is lost.

One encounters other facts as well. Certain accreditation committies - seeking to keep workers at an enterprise by all available means, including salary hikes and promotions - lower the requirements for know-how and practical experience and, occasionally, just close their eyes to individuals with insufficient training. It is with this kind of frivolity, frequently without the need to complete instruction in theory, that the Frunze factory of sanitary equipment, belonging to the USSR Ministry of Installation and Special Construction Work and certain other enterprises, hand out promotions. Here, over a 7-8 year period, many workers pass through all the stages from entry-level to senior-level (level 6). As a rule, such a worker does not know the true worth of his qualification level and is unable to appreciate its value. And when such a worker relocates to a factory such as "Tyazhelektromash" [Heavy Electrical Equipment], where qualification guidelines are scrupulously observed, he is politely offered a starting position at grade level three to show his mettle.

Economic incentives should be used to stimulate workers' desire to constantly raise their level of know-how. But this process has to be effectively guided; equipment and technology should be updated in a timely manner, and a brigade-style labor organization broadly developed. However, we are still not giving enough attention to studying the inner driving force that motivates a worker to improve his qualifications as part of his productive activity. There are various reasons for this. Managers expend much strength and energy on fulfilling the plan. Staff members dealing with questions of specialists do

not always have the requisite knowledge [to do their jobs]. The scientific community has thus far also shown little interest in the issue.

In Kirghizia, during both the 10th and 11th five-year plans, the question of training and utilizing specialists of the indigenous nationality, which comprises half of the population, has remained a compelling one. In addition, they represent only 18 percent of industrial laborers and a mere 8 percent of those employed in machine building. To a large extent, this is attributable to the low level of territorial and professional mobility of the agrarian population. Also, the local populace is involved to a greater extent in individualized economic pursuits. It is appropriate to underscore the fact that our rates of population growth are the highest in Central Asia. The republic is rightfully proud of its 100,000-strong contingent of mothers having large families, although this complicates somewhat the question of finding a place for them in the sphere of social productivity. There are also difficulties rooted in history: the ancient traditions of the people, the lingering impact of an economy in which, for a prolonged period, nomadic shepherding was the dominant element.

To achieve greater involvement by the principal population group in social productivity, the republic is systematically enacting appropriate measures, in the elaboration of which the State Committee on Labor and Wages has played a central role. Intensive effort is being given to developing a network of enterprises in the mining and electrotechnical industries within the traditionally rural areas of the Issyk-Kul and Naryn Oblasts. By the end of the five-year plan, an additional 33 affiliates of industrial enterprises will be constructed in rural areas. Elements of the agro-industrial complex are being erected at a rapid pace. In short, industrial production is reaching toward the sources of the labor force. Through the efforts of organized selection by the republic State Committee on Labor and Wages, an ever-more significant portion of rural labor assets is being reallocated to industry, including those branches shaping the course of technological progress. All this will permit more effective utilization of local labor resources and will contribute to the numerical growth and qualitative improvement of the working-class contingent of the indigenous nationality.

There are still many unresolved questions about specialist training. In our view, these include questions that require a centralized review process. For example, training and retraining of skilled workers are becoming increasingly more massive in scope, more extensive in time and, therefore, more expensive. There was a time that workers were paid a stipend when they were sent for courses of instruction at an educational center. Today, the government provides them payment of a standard rate, usually at the average wage. The millions of rubles spent on training have a bearing on the cost of industrial output. At the same time, while acquiring a new profession, workers have no responsibility to the enterprise. Obviously, it is time to establish such responsibilities. For example, to define the period of stipend payback in a given enterprise. As a result, undoubtedly the changeover of workers will decrease as well as the extent of the present leaders' questionable practices, in the race to economize, of attracting qualified workers from the outside instead of seriously being concerned with training them in-house.

As is well known, the leadership for specialist training in industry is now responsible along several channels. Organs of Gosplan plan and control the course for fulfilling the plans for specialist professional training. Organs of Gosplan are implementing a single state policy on this question. Control over carrying out the decisions of the party and government in the area of training and raising qualifications of specialists in industry is entrusted to the labor organs. One would think, in such a division of the spheres of action in the highest units of control, there would be no contradictions. But, if one looks at the problem from the unit and the enterprise, the picture turns out to be different. The fragmentation of control functions inevitably gives rise to duplication and subjective evaluation of the state of affairs and does not ensure the proper control over the professional training of specialists.

Often, the head of a plant's department for unit specialist training must carry out a multitude of different instructions. Obviously, here there must be a single boss. The improvement of the organization of training and the upgrading of specialists' qualifications takes on a still-greater significance in connection with those in-depth qualitative transformations which will occur in the immediate future in the sphere of general education and professional training of the young generation in the course of carrying out school reforms. All work on the development of man's capacity for work is being raised to a new, higher level. Forming the work force's qualification is a single integrated system, consisting of general education training, professional orientation, the acquisition of work habits, the mastering of a profession, and further professional growth which can last throughout a person's working life. Therefore, it is impossible to be limited to a specific improvement of one particular aspect of this work. Needed is a basic restructuring of all trends of activities, including professional training for workers in industry. Today, in the majority of cases, such training is often conducted in accordance with abbreviated programs with an orientation for training [students] in the acquisition of habits and skills of little use. Here, mainly, the theoretical part of the program: electronics, physics, heat engineering, technology of metals and technical drawing, is shortened. But, it is precisely these subjects which make up a worker's fundamental qualification. The necessity for thorough general and technical training and the upgrading of the quality of training demand a critical review of the active training programs in many working professions which earlier were corrected repeatedly by reducing the number of school hours. It is necessary to reduce the scope of unwarranted increases of the enterprises' independent action on the question of what to teach, whom to teach, and how many workers to teach.

In the December (1983) Plenum of the CPSU Central Committee, a task was decreed TO DO WHAT IS NECESSARY TO ALLOW THE INDUSTRIAL AND SCIENTIFIC AND TECHNICAL POTENTIAL OF THE COUNTRY TO BE FULLY UTILIZED. To obtain an

improvement in efficiency from people and machines, all material and real factors of industry is possible on the basis of uninterrupted improvement of workers' knowledge, know-how, and habits. The achievement of this goal is decided on the basis of the activities of the republic's State Committee on Labor and Wages and its local agencies.

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CSO: 1828/161

BOOK ON AGRICULTURAL MANPOWER DISTRIBUTION REVIEWED

Moscow EKONOMICHESKIYE NAUKI in Russian No 12, Dec 83 pp 106-108

[Review by B. Gershkovich and Yu. Davidov, professors, doctors of economic sciences, Pyatigorsk, of book "Trudovyye resursy sel'skogo khozyaystva. Voprosy teorii i metodologii" ["Agricultural Manpower Resources. Questions of Theory and Methodology"] under the editorship of Doctor of Economic Sciences V. N. Ovchinnikov, Mysl, Moscow, 1982, 115 pages]

[Text] The successful implementation of the program for socio-economic development of the countryside, developed by the 26th Party Congress and the May (1982) Plenum of the CPSU Central Committee, depends to a considerable extent on the condition of labor resources. This circumstance has found rather broad reflection in economic research lately. The problems of labor resources and manpower on sovkhozes and kolkhozes are often dealt with in mass-produced publications and also on radio and television broadcasts. However, at the same time attention is usually concentrated on the reproduction of labor resources themselves and on the provision of these resources to agricultural enterprises. Far less is said about another side of the problem which ultimately has deciding significance. This is the interrelationship between the development of agricultural production and the quantity and quality of labor resources. The problems of the correspondence of material and personal factors of agroindustrial production are still not being analyzed sufficiently. The work being reviewed is attractive first of all because the authors attach paramount importance to these relatively little-studied matters. The current problems of the development and interrelationship of a system of specialized education with the formation of rural manpower resources are also subjects for special consideration in the book.

The monograph is set up so that the most important theoretical questions are examined in the beginning, followed by the matters which have a direct impact on practice. One must admit such an approach is successful. Not belittling the importance of the examination of the practical side of the problem of labor resources, it must be emphasized nevertheless that a study of the quality, quantity, and composite structure of labor resources is possible only on a solid theoretical basis, because otherwise when solving a number of practical problems, one would have to be guided only by already formed trends and proportions which do not always respond to the development of the country's agriculture.

In the book being reviewed, we believe the problems concerning the essence and characteristics of the manifestation of a law of correspondence of the personal and material factors of production in the agrarian sphere of the economy are examined as extensively and in such detail for the first time in economic literature. The authors convincingly disclose the specifics of the operation of this law under conditions of intensified agrarian industrial integration. These specifics are expansion of this area and the appearance of special demands on the personal element, caused by the new forms of organization of production and the perfection of material elements of production. A worker of the agroindustrial type should have a higher general education and specialized training, know related trades, be able to quickly respond to changes occurring during the year, and not only know the fundamental production of agriculture products, but also the technology of its processing, storage, and so forth. One must agree with the authors that, presently, a man with a specialized secondary education in agriculture is a worker close to the idea "worker of the agroindustrial type."

The description of the quality of the work force involved in agroindustrial production attracts a great deal of attention. Of course, the theoretical development of the category "quality of work force" in economics is still obviously insufficient. Moreover, the possibility of singling out this category is not recognized by all economists. The argumentation and proof of the analysis given by the monograph's authors convinces one not only of the correctness, but also of the necessity for further research of this category.

The study of the requirements which are made on the structural elements of the quality of the work force in the agroindustrial production system and the ways to rationalize the labor activities of rural laborers is of practical significance. Agroindustrial integration makes possible the expansion of the sphere of application of skilled workers, the substantial improvement of the use of annual resources of work time, the overcoming of the seasonal fluctuation of agricultural work, the reduction of the number of those directly engaged in agriculture and correspondingly, the increase of the quality of workers employed in industries serving agriculture and the improvement of the qualitative composition of labor resources.

The working experience of a large number of farms which combine agricultural activities with the development of industrial production is evidence of the widely-practiced switching of the portion of labor resources which are freed during the off season from agricultural production to industrial production and back. Such a combination leads to a reduction of the overall labor force requirement. According to the calculations of the monograph's authors, the lowering of the coefficient of seasonality of labor on the kolkhozes from 11 to 7 percent in connection with the development of processing production on them makes possible the improvement of the use of the annual resource of work time by 12 percent and; thereby, an increase of the annual labor payment by 27 percent. (see page 41)

All measures directed at overcoming the seasonality of agricultural work are also factors which accelerate its industrialization. The introduction of

machines, the precise internal division of labor that comes from a system of machines (according to their operation), the forms of internal production organization (specialization, cooperative formation, combine formation) result in the separation of labor and the corresponding methods of organization of technological processes (flow line production, regularity) are distinctive characteristics of industrial labor in general. Higher productivity is an indisputable quality of labor and expresses its economic superiority. Full-scale mechanization of agricultural work serves as an important condition for the further progressive development of the agroindustrial complex. The book's authors consider it necessary to make the capital-labor ratio approximately 3 to 4 times greater for its implementation. (see page 44) In particular, the very fact that the proportion of agricultural workers who are engaged chiefly in manual semi-skilled work and in unskilled work now makes up two-thirds of the total number employed which is 1.5 times the corresponding indicator in industry speaks to the timeliness and scale of tasks which are being decided in the process of the realization of full-scale mechanization of agricultural production. (see page 50)

Agricultural integration, acting as a factor intensifying rural industrial development leads to progressive structural changes in the vocational division of labor in the countryside and to a rise in the proportion of skilled workers. The very expansion under the terms of agroindustrial synthesis of a number of agricultural vocations through the vocations of mechanized labor, as the authors correctly note, have as one of their important social consequences a growth in the people's feeling of satisfaction with the possibilities of choosing a vocation that is interesting to them. Another result is that the mechanized labor vocations, which carry a lot of prestige (great social significance from the point of view of those choosing), are preferable from the point of view of prospects of improving one's skill and social-vocational advancement.

Agrarian-industrial synthesis, changing the character, content, conditions and results of agricultural work and promoting the growth of its prestige, thereby results in the consolidation of the labor force, especially of rural youth. Let us note, for example, that the departure of people from the Moldavian sovkhoz-plants is less than half of that from kolkhozes.

The development of rural industry and its combination with highly developed industrialized agriculture play an important role in the implementation of the progressive structural improvements in the expenditures of various types of labor in the whole society. The ratio of the number of workers engaged in creative intellectual work (specialists with a higher education) and groups of people from the middle-level service personnel (with a specialized secondary education), whose work is also chiefly intellectual, should change from 1:1 to 1:4 in the near future according to the opinion of the authors of the book being reviewed. At the same time considerable changes will occur in the structure of employment in primarily physical labor. The proportion of mechanized labor workers will approximately double, reaching 80 to 90 percent. Regarding the preservation of a small group of people engaged in manual labor, it will have no connection with the remains of the unskilled,

simply physical labor. The subject is something else--the preservation of a highly skilled group of manual labor workers for the adjustment and repair of automatic and fully mechanized technological lines. (see page 55)

As the analysis made by the authors of the reviewed work shows, agroindustrial integration not only necessitates raising the general education and vocational skill levels of rural laborers, but also creating certain conditions for the realization of these demands. The increase of the amount of free time of workers of agroindustrial enterprises and the improvement of the structure of its use in the interests of raising the cultural-educational level are indicative of this.

A sizable part of the book is allocated to the role of specialized education in the formation of rural manpower resources. The authors, on the basis of extensive factual material, give an analysis of the provisioning of skilled personnel for RSFSR and show the specific directions for refining the qualitative, quantitative, and composite structure of rural personnel.

In the final chapter of the work the most promising directions for the improvement of a system of preparing middle level specialists for agroindustrial production are disclosed. The authors focused basic attention on those aspects of improving the system of training of personnel, which emerged in connection with the scientific-technical revolution.

Of course, in a short review it is impossible to dwell on all matters examined in the book. Let us note; however, that a number of the authors' opinions seem questionable to us. This especially applies to the questions connected with the content of the law of correspondence of personal and material factors of production and also with the description of the quality of the work force. In our opinion, the study would have benefited if some points, especially those in the last (fourth) chapter, were not stated as a thesis, but in more detail. For example, the authors, having given special attention to the middle level personnel, at the same time, treat the problems of the top section of mass vocations only in a general way, although the book is oriented to the study of rural manpower resources as a whole. The trends in the ratio of middle level personnel and mass vocations remain outside the authors' field of vision, although it is one of the important components of the composite structure of the rural work force. The analysis of the advantages of the new form of training the middle level workers by the sovkhoz-tekhnikum is conducted only theoretically, without factual substantiation.

In our opinion the work would have benefited if the authors would have more extensively disclosed the problem noted by them concerning the formation of a worker of the agroindustrial type as influenced by the law of change of labor under conditions of agroindustrial integration. We believe that the authors have not yet succeeded in finding an integral process for the transfer of requirements of the law of correspondence of personal and material factors of production to the structure for training the middle level personnel, because some elements of this process are analyzed on an essential, not functional level.

The interesting idea concerning the possibility of a quantitative, comparative appraisal of the level of development of economic regions is expressed in the book, but the idea used indirectly in the practical part to determine the long range requirements for middle level personnel.

In conclusion, we note that there are many practical conclusions and suggestions in the monograph. Some of them have already been discussed here. We would also like to point out the value of the suggestion to create an automated system of tracking the level of development of agrarian production in particular regions of the country. The system could serve as a basis for the quick analysis of the situation in agricultural production and for development of scientifically-substantiated specialization of various economic regions. It could help planning agencies insure maintenance of the organic unity of material and personal factors of production. A number of suggestions of the authors are already finding application in the practice of the agricultural tekhnikum.

The book is well edited and is interesting to read and will be useful to everyone who is interested in the problems of manpower resources in the agrarian sphere of production.

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DEVELOPMENT OF ESTONIAN VOCATIONAL EDUCATION TRACED

Tallinn IZVESTIYA AKADEMII NAUK ESTONSKOY SSSR: OBSHCHESTVENNYYE NAUKI in Russian Vol 33, No 1, Jan-Apr 84 pp 25-33

[Article by Harry Roots: "The Development of the Vocational and Technical Education System of the Estonian SSR from 1959 to 1980"]

[Text] In conditions of scientific and technical progress there constantly arises a need for production in the skilled labor force. Development of the basic forms of their training, therefore, is particularly important. Improvement of the training of skilled laborers, both on the job and in the vocational-technical education system, on the one hand ensures production of the required number of workers, and, on the other, creates the prerequisites for further improving the cultural and professional level of the working class.

During the period considered, significant changes took places in the republics' vocational-technical educational system. Expansion of the network of schools and growth in the number of students were accompanied by changes in the trade and vocational pattern of the graduates and improvement in the quality of training. For the four 5-year plans examined, the number of schools increased more than one-and-a-half times, and the number of students grew 3.6 times (cf. Table 1).

To improve the level of vocational-technical education in the republic, the Main Administration for Vocational-Technical Education [Glavprofobr] under the ESSR Soviet of Ministers was created in 1959.[1] The former schools of the labor reserves, as well as the departmental vocational schools of the republic Sovnarkhoz, Ministry of Trade, Ministry of Local Economy and Ministry of Culture were put under its jurisdiction.[2]

As of 1 January 1959, there were 31 vocational schools functioning in the republic, 20 of which were part of the labor reserves system, and the rest were subordinate to 7 other ministries and organizations.[3] In accordance with a resolution of the ESSR Council of Ministers of 24 July 1959, the training course center of the ESSR Ministry of Local Economy, which trained custom tailors, seamstresses, hairdressers and custom shoemakers, was transferred to the Estonian Republic Administration of Labor Reverves.[4] By decree of the Estonian Communist Party Central Committee and the ESSR Council of Ministers of 25 August 1959, an additional five departmental educational institutions

were transferred to what was now the Glavprofobr under the ESSR Council of Ministers: the FZU [factory apprenticeship schools of the "Krengol'mskaya Manufaktura" and "Baltiyskaya Manufaktura" combines, the FZU school of the ESSR Administration of the Food Industry Sovnarkhoz [Council of the National Economy] (bakers, confectioners, candymakers), the training combine of the ESSR Ministry of Trade (sales clerks, cooks) and the firm engineering school of the ESSR Ministry of Culture (film technicians).[5] The training course center, the FZU school of Administration of the Food Industry and the training combine of the Ministry of Trade were reorganized into trade schools. The schools of horticulture in Arkna, cattle-breeding in Tori and forestry in Kuremaa, as well as the Pyarnusk sea-faring school and the cooperative trade school of the ERSPO [Estonian Republic Union of Consumer Societies] remained subordinate.[6] By a resolution of the Estonian SSR Council of Ministers of 24 August 1960, the trade training combine and the food industry FZU school were combined into Trade School No 15.[7]

Table 1

Development of the ESSR Vocational-Technical Educational System 1960-1980
(for 1 January)

	1960	1965	1970	1975	1980
Number of schools	21	24	27	33	36
Number of students, in thousands	4.1	6.3	8.3	11.8	14.9

Source: The National Economy of the Estonian SSR in 1980: Statistical Annual. Tallinn, 1981, p 212.

Centralization of vocational-technical educational institutions under the Gosprofobr [State Committee for Vocational and Technical Education] was very important to the further development of vocational education in the republic, for with this departmental barriers in vocational education were for the most part done away with, unity of leadership in teaching and educational work was ensured, and the quality of training of the young work force was improved.

In 1961 there were in the republic 25 vocational-technical schools (PTU) under the Gosprofobr, including one technical (TU), six trade (RU) and one railroad (ZhDU),[8] eight construction schools (SU) and four schools for the mechanization of agriculture (UMSKh), a film engineering school, an FZU school of the Krengol'mskaya Manufaktura and an FZO cost accounting school for training chauffeurs.[9] The last was created on the basis of an order of the Main Administration of Labor Reserves of 18 March 1959 and graduated its first class--126 chauffeurs--in 1960.[10]

The vocational-technical educational system was thus entrusted with the training of a skilled labor force for all sectors of the national economy. The training of workers primarily for occupations not requiring more than 6 months of training continued to fall directly on production. In the Glavprofobr system the training period ranged from 1 to 3 years (Table 2).

Table 2

Distribution of Those Admitted by ESSR Vocational-Technical Schools in 1961

Instruction Period	Total Admissions	To Trade Schools, Railroad Schools	To construction Schools	To Schools for the Mechanization of agriculture	To Factory Apprenticeship Schools	To the FZO School (Chauffeurs)
	3721	1263	1130	903	295	130
Up to 1 year	605	---	325	150	---	130
1-1.2 years	1095	237	75	513	270	---
2 years	1716	821	630	240	25	---
3 years	305	205	100	---	---	---

Source: TsGAOR [Central State Archives of the October Revolution and Socialist Construction] ESSR, f. r-973, op. 9, d. 175, l. 205.

As can be seen from Table 2, nearly half the students followed the 2-year curriculum, which enabled the changeover in 1957 of a number of construction schools from 10-month to 2-year curricula in connection with the beginning of training of construction workers for contiguous, as well as more complex, occupations.[11] The increased instruction periods ensured better training of the work force in comparison with training at short-term production and technical courses and individual-brigade training on the job.

In accordance with the law "on strengthening the connection between school and life" and the decree of the Estonian Communist Party Central Committee and ESSR Council of Ministers of 10 February 1961 "on the further development and improvement of training of the skilled labor force in vocational-technical educational institutions and on the job," vocational-technical educational institutions were reorganized into city PTU's with 2-3 year, and rural PTU's with 1-2 year curricula. The formation of a new system of vocational-technical education in the republic was basically accomplished by just this. In 1962, on the basis of the PTU, mobile courses for training and improving the skills of workers were also organized, which 3300 people completed that year.[12] New construction schools were also opened in Narva and Kallaste.

Expansion of the PTU network permitted the quality and quantity of trained skilled workers to be raised. From 1959 to 1980, vocational-technical schools assigned a total of 89,724 young workers to work, including 24,567 (27 percent) to industry, 23,718 (26.4 percent) to construction and 22,709 (25.3 percent) to agriculture (cf. Table 3). The total number of workers trained was 106,978 (cf. Table 4). The difference in the figures is explained by the fact that night school students, and also some portion of the graduates, either entering tekhnikums or being drafted, were not considered assigned to work. Therefore,

the data here on the distribution of PTU graduates by acquired trades are given for all trained workers, and data on the distribution of graduates by sector of the national economy, according to those assigned to work.

Table 3

Distribution of PTU* Graduates by Sector of the ESSR National Economy from 1959-1980

Sectors	Total Assigned to Work	1959-1965	1966-1970	1971-1975	1976-1980
	89,724	20,557	18,957	23,566	26,644
Industry	24,567	5,160	4,018	6,989	8,400
Construction	23,718	6,041	5,893	6,161	5,623
Transport	4,891	1,006	1,362	1,243	1,280
Communications	1,750	---	260	668	822
Agriculture	22,709	6,710	4,248	5,725	6,026
Trade and Public Catering	6,081	---	1,429	1,899	2,753
Housing and Personal Services	2,219	---	923	314	982
Other Sectors	3,789	1,640	824	567	758

*Excluding graduates of evening departments.

Source: TsGAOR ESSR, f. r-10, op.8, d. 659, 1.28; d.746, 1.2, 26, 27, 35, 36, 51, 52; d. 757, 1. 3, 4, 19, 20, 26, 27, 40, 41; Archives of the TsSU [Central Statistical Administration] ESSR, f. 1, op. 6, d. 770, 1. 8; d. 783, 1.8; d. 798, 1. 4; d. 815, 1. 5; d. 828, 1. 6; d. 838, 1. 9; d. 855, 1. 8; d. 882, 1.6; Archives of the Collective Use Computer Center (VTsKP) TsSU ESSR, f. 1, op. 5, d. 1943, 1. 8-10; d. 2063, 1. 8-10; group 47, 1978, d. 31, 1. 7-9; 1979, d. 32, 1. 8-10; 1980, d. 32, 1. 8-10. Compiled by author.

The data in Table 3 indicate a growth in the average annual graduation of workers from PTU's from 2937 during the years 1959-1965, to 5329 during the years 1976-1980, i.e., 1.8 times as many. The number of workers trained for industry increased by 2.3 times, and for construction and agriculture by 1.3 times. In 1980 industry received 34.5 percent of all graduates assigned to work.

At the same time, the vocational pattern of the students widened (cf. Table 4). With the transfer of departmental vocational schools to the jurisdiction of the Gosprofobr, the vocational-technical educational system began to supply the labor force for the light and food industries and spheres of the social services. It began to turn out more metal workers, machinists electricians, wood lathe operators, etc.

Table 4

Training of Labor Force in ESSR PTU's During the Years 1959-1980 by Individual Occupation

(1) Профессия	(2) Всего подготовлено рабочих	1959—1965	1966—1970	1971—1975	1976—1980
	106978	21464	21489	29120	34905
(3) Каменщики, монтажники конструкций, штукатуры, маляры	10007	3346	2244	2397	2020
(4) Киномеханики	1197	335	359	270	233
(5) Машинисты, их помощники, мотористы, трактористы, трактористы-машинисты	20789	5560	3518	5646	6065
(6) Механизаторы мелиоративных и ирригационных работ	4195	113	1327	1894	861
(7) Монтеры, электромонтеры, электромеханики	7497	1507	1154	2082	2754
(8) Парикмахеры	1510	162	326	621	401
(9) Пекари, кондитеры, повара, конфетчики	4547	771	946	1202	1628
(10) Портные, швеи, закройщики	6906	660	1142	2189	2915
(11) Продавцы	2956	493	770	963	730
(12) Слесари	15775	3091	3475	4092	5117
(13) Станочники по дереву	5545	963	1021	1552	2009
(14) Станочники по металлу	3500	522	758	988	1232
(15) Ткачи, прядильщицы, ровничницы, мотальщицы, текстильщицы, вязальщицы	3568	1119	901	827	721
(16) Шоферы	5212	907	857	1009	2439

Source: National Economy of the Estonian SSR in 1970, p 245; National Economy of the Estonian SSR in 1971, p. 250; National Economy of the Estonian SSR in 1974, p 247-248; National Economy of the Estonian SSR in 1975, p. 234; National Economy of the Estonian SSR in 1980, p. 215; TsGAOR ESSR, f. r-10, op. 8, d. 659, l. 33-39; d. 757, l. 3, 4, 19, 20, 26, 27, 40, 41, 65, 73, 82, 119, 120; Archives of the TsSU ESSR, f. 1, op. 6, d. 770, l. 34-53; d. 783, l. 29-43. Computed and compiled by author.

Key:
1. Occupation
2. Total workers trained
3. Brick layers, construction assemblers, plasterers, painters

4. Movie technicians
5. Machinists, machinists' assistants, motor mechanics, tractor drivers, tractor drivers-mechanics
6. Mechanization specialists for reclamation and irrigation work
7. Mounters, electricians, electrical engineers
8. Hairdressers
9. Bakers, confectioners, cooks, candymakers
10. Tailors, seamstresses, cutters
11. Sales clerks
12. Fitters
13. Wood Lathe operators
14. Metal Lathe operators
15. Weavers, spinners, roving frame operators, winders, textile workers, knitters
16. Chauffeurs

Table 5

Distribution of Students Admitted into ESSR PTU's from 1970-1980 by Training Periods in Percent

Year	Total	Training Periods: Up to 1 Year	1-2 Years	2-3 Years	More than 3 Years
All PTU's					
1970	100.0	32.7	47.4	19.9	---
1975	100.0	37.2	21.3	40.6	0.9
1980	100.0	37.1	9.0	53.0	0.9
City PTU's					
1970	100.0	25.9	47.4	26.7	---
1975	100.0	22.0	22.5	54.0	1.5
1980	100.0	10.4	5.1	82.8	1.7

Source: Archives of the TsSU ESSR, f.1, op. 6, d. 882, l. 16; Archives of the VTsKP TsSU ESSR, f. 1, op. 5, d. 1709, l. 19, group 47, 1980, d. 32, l. 15. Author's calculation

From 1970 to 1980 the instruction periods in the PTU's grew rapidly (Table 5). The number of students who trained for 2 years or more during the decade nearly doubled. That contingent in the city PTU's comprised in 1980, 84.5 percent of all admitted, and in the rural PTU's, 60.7 percent.

Extension of the instruction periods was directly tied to the gradual conversion to secondary PTU's. The first groups of students began to study according to the secondary PTU program in 1967. In accordance with a resolution of the ESSR Council of Ministers of 8 April 1968, three secondary PTU's began to function that year, and five in 1969. By decree of the Estonian Communist Party Central Committee and the ESSR Council of Ministers of 28 May 1969 "On measures for further improving the training of skilled workers in educational institutions of

the vocational-technical education system," it became mandatory to train workers for new, more complex trades and, in connection with this, gradually transform all city and rural PTU's into secondary PTU's with 3 to 4-year instruction periods.[13] Such a reorganization was effected during the 10th 5-Year Plan (cf. Table 6).

The following data also indicate an improvement in the quality of education: From 1965-1980 the total number of managers, teachers and masters of vocational training in schools of the vocational-technical educational system increased from 693 to 1330, while the number of specialists with higher education among them rose from 105 to 563, or by a factor of 5.4, and the number of specialists with middle trade education rose from 288 to 498, or by a factor of 72.9 percent in 1965 to 78.4 percent in 1980.[15]

The level of education of the students also rose. The great bulk of youth admitted into PTU's during the period considered consisted of boys and girls with an incomplete secondary education (cf. Table 7). The share of individuals with less than an eighth-grade education diminished from 26.9 percent in 1965 to 3.4 percent in 1980. The creation of supplementary groups for youth with a secondary education permitted their share in the total admitted to increase from 1.3 percent in 1965 to 31.2 percent in 1980. The latter circumstance, as well as the switchover to the secondary PTU, points to the fact that the vocational-technical educational system in essence entered a qualitatively new period in its development.

In connection with this, it is necessary to say more about one function of the vocational-technical educational system. Youth of varied social backgrounds enter PTU's, but upon graduation they on the whole join the ranks of the working class. The vocational-technical educational system replenished the skilled kolkhoz farm labor force to a lesser degree, and serves as the very channel for youth's social change. The fact is that until 1965, primarily kolkhoz youth entered vocational-technical schools, and until 1977, primarily rural youth (cf. Table 8). From the 1959 All-Union census data, it appears that city-dwellers comprised 56.4 percent, and kolkhoz peasantry only 20.6 percent of the republic's population,[16] but among those admitted into the vocational-technical schools for the same year, only 25.2 percent were city youth, and 38.4 percent were kolkhoz youth.

In 1960, 34.5 percent of those admitted to PTU's were kolkhoz youth, but only 14.0 percent of the graduates went to kolkhozes, and so forth. The vocational-technical educational system opened for rural youth great possibilities for "becoming part of" the city population, for joining the ranks of the city workers.

According to the 1970 All-Union census data, city-dwellers then comprised 65.0 percent of the total population of the republic, and only 13.1 percent of the inhabitants of the ESSR were kolkhoz farmers.[17] In spite of this, of the number admitted to PTU's, only 44.6 percent were city youth, and 21.8 percent were kolkhoz youth. By 1980 the republic urbanization level had reached 70.1 percent[18]--an indicator from which the share of city youth among those admitted to PTU's, which in 1977 had exceeded 50 percent, nonetheless substantially lagged. Although the size of the rural population during the period considered continually diminished, the number of rural youth admitted to PTU's remained comparatively stable.

Table 6

ESSR Secondary PTU's from 1970-1980
(at the beginning of the school year)

Year	Number of Secondary PTU's	Number of Students	Number Admitted that Year	Number Finished that Year
1970	7	1619	933	113
1971	8	2369	1174	200
1972	10	2912	1184	424
1973	12	3846	1863	662
1974	16	4605	2241	934
1975	18	5925	2601	890
1976	22	7254	3069	1377
1977	23	8059	3150	1717
1978	25	8814	3455	2092
1979	25	9307	3629	2438
1980	25	9646	3678	2496

Source: National Economy of the Estonian SSR in 1975, p. 325; National Economy of the Estonian SSR in 1980, p. 305; Archives of the TsSU ESSR f. 1, op. 6, d. 882, l. 20; Archives of the VTsKP TsSU ESSR, f. 1, op. 5, d. 1343, l. 16; d. 1482, l. 16; l. 18; d. 1709, l. 19; d. 1943, l. 21; d. 2063, l. 22; group 47, 1978, d. 31, l. 11; 1979, d. 32. l. 15; 1980, d. 32, l. 11. Compiled by author.

Table 7

Level of Education of Students Admitted to ESSR PTU's
from 1965-1980

Year	Total Students Admitted	Level of Education of those Admitted, in Percent		
		Below 8th-Grade	Incomplete Secondary	Secondary
1965	4155	26.9	71.8	1.3
1966	4356	29.5	65.1	5.4
1967	4554	31.3	63.4	5.3
1968	4451	31.6	62.2	6.2
1969	4771	30.7	62.8	6.5
1970	5523	29.6	61.6	8.8
1971	5568	23.4	66.8	9.8
1972	5527	19.6	70.0	10.4
1973	5957	16.6	72.3	11.1
1974	6058	10.1	77.6	12.3
1975	6551	10.0	76.9	13.1
1976	5934	4.9	78.0	17.1
1977	6053	4.0	77.1	18.9
1978	6350	4.4	70.1	25.5
1979	6637	3.6	66.2	30.2
1980	6830	3.4	65.4	31.2

Source: Archives of the TsSU ESSR, f. 1, op. 6, d. 798, l. 12; d. 815, l. 15; d. 828, l. 14; d. 838; l. 14; d. 855, l. 15; d. 882, l. 20; Archives of the VTsKP TsSU ESSR, f. 1, op. 5, d. 1343, l. 17; d. 1365, l. 21; d. 1482, l. 16; d. 1633, l. 19; d. 1709, l. 19; d. 1943, l. 27; d. 2063, l. 27, group 47, 1978, d. 31, l. 16; 1979, d. 32, l. 18; 1980, d. 32, l. 16. Author's calculation.

Table 8

The ESSR Vocational-Technical Educational System as a means for Social change of Youth from 1959-1980

Year	Admitted				Assigned to Work		
		From the Village				To Farming	
	Total	From the City	Total	Children of Kolkhoz Farmers	Total	Total	To Kolkhozes
1959	2438	614	1824	937	2168	1166	—
1960	3528	899	2629	1216	[illegible]368	687	359
1961	3170	788	2382	1035	2953	1111	444
1962	4102	984	3118	1547	3435	951	360
1963	3707	978	2729	1184	3365	961	430
1964	3153	945	2208	1289	2750	700	343
1965	4192	1283	2909	1394	3318	934	475
1966	4406	1629	2777	1323	3383	775	405
1967	4579	1649	2930	1333	3878	1047	477
1968	4793	1856	2937	1494	3638	679	423
1969	5408	2056	3352	1276	4157	841	503
1970	6424	2864	3560	1401	3901	906	506
1971	5568	2542	3026	1505	4220	1075	576
1972	5527	2401	3126	1374	4706	1016	506
1973	5957	2847	3110	1347	4559	986	541
1974	6058	2822	3236	1329	4941	1306	692
1975	6551	3044	3507	1624	5140	1342	729
1976	5934	2927	3007	1185	4962	1344	656
1977	6053	3207	2846	1235	5075	1294	543
1978	6350	3495	2855	1180	5216	1072	548
1979	6637	3543	3094	1345	5611	1124	574
1980	6830	3775	3051	1356	5780	1192	630

Source: TsGAOR ESSR, f. r-10, op. 8, d. 659, l. 20-23, 28; d. 746, l. 2, 7, 22, 26, 27, 35, 36, 41, 47, 51, 52; d. 757, l. 3, 4, 10, 19, 20, 26, 27, 30, 35, 40, 41, 119, 120, 124, 125; Archives of the TsSU ESSR, f. 1, op. 6, d. 770, l.8, 16; d. 783, l. 8, 17; d. 798, l. 4, 17; d. 815, l.5, 15; d. 828, l.6, 14; d. 838, l. 9, 14; d. 855, l. 8, 15; d. 882, l.6, 20; Archives of the VTsKP TsSU ESSR, f. 1, op. 5, d. 1343, l. 10, 17; d. 1365, l. 11, 15; d. 1482, l.5, 16; d. 1633, l. 7, 8, 19; d. 1709, l.7, 19; d. 1943, l.8, 9, 27; d. 2063, l.8, 9, 27; group 47, 1978, l. 31, l. 7, 8, 16; 1979, d. 32, l. 8, 9, 18; 1980, d. 32, l. 8, 9, 16. Compiled by author.

By taking into account the distribution of PTU graduates, one can assert that during the years 1959-1965, 11,089 people moved from the village to the city through the vocational-technical educational system, and during the 8th, 9th and 10th 5-Year Plans, 11,308, 10,280 and 8827 people did so respectively. By this means, 18,189 people went from the kolkhoz peasantry into the ranks of the working class.

At the same time, one finds an equalization between the pattern of those admitted to PTU's and the population pattern. The share of the city population in the republic grew, as noted above, from 56.4 percent in 1959 to 70.1 percent

in 1980, a growth index of 1.24. The share of city youth among those admitted to PTU's increased for that period from 25.2 to 55.3 percent--a growth index of 2.19. That means that both patterns are developing in the same direction, but not at the same rates, which is the basis for their coming together. The rapid filling up of the PTU's by youth indicates a movement of the latter towards an occupational and social orientation, and this is largely related to the expansion of the network of secondary PTU's and TU's.

Thus, the republic vocational-technical educational system during the years 1959-1980 went through a significant course of development. The average annual training of young workers doubled, the number of graduates increased, the nomenclature of specialties learned expanded, and great strides were made in the distribution of graduates among the sectors of the national economy. The vocational-technical educational system is providing skilled replenishment to the working class and kolkhoz peasantry. The transition to secondary vocational-technical education has been completed. Youth with a secondary education now comprise one-third of those admitted. Expansion of the secondary PTU and TU network has significantly heightened the interest of city youth in obtaining workers' skills in vocational-technical schools. Curricula have been perfected and the qualifications of teachers and masters of on-the-job training have risen. All of this provides grounds for talking about the substantial increase in the role of the vocational-technical educational system, both in the quantitative and qualitative growth of Estonia's working class ranks. But with all of these positive things, one must not forget that in the early 80's, just as before, the great bulk of the young replenishment of the working class was trained directly on the job.

FOOTNOTES

1. Order of the Presidium of the ESSR Supreme Soviet of 24 August 1959--Records of the ESSR, 1959, No 46, art. 246.

2. Decree of the Estonian Communist Party Central Committee and the Council of Ministers ESSR of 25 August 1959 "On improving the leadership of vocational and technical education in the Estonian SSR."--Records of the ESSR, 1959, No 46, art 249.

3. TsGAOR ESSR, f. r-973, op. 9, d. 76, l. 47.

4. Ibid., d. 74, l. 1; d. 76, l. 16.

5. Records of the ESSR, 1959, No 46, p 249.

6. TsGAOR ESSR, f. r-973, op. 9, d. 151, l. 67, 77.

7. TsGAOR ESSR, f. r-973, op. 9, d. 151, l. 20, d. 175, l. 201.

8. Ibid., d. 45, l. 10.

9. Ibid., d. 175, l. 201-204.

10. National Economy of the Estonian SSR in 1971, p 250.

11. TsGAOR ESSR, f. r-973, op. 9, d. 22, l. 78; d. 45, l. 9.

12. Second Session, Sixth Convocation of the Estonian SSR Supreme Soviet, 16-17 October 1963. Stenographic record. Tallinn, 1963, p 15.

13. Records of the ESSR, 1969, No 26, art 267, Cf. also Decree of the Estonian Communist Party Central Committee and Council of Ministers ESSR of 12 July 1972, "On further perfecting the vocational and technical education system and improving the training of the labor forces."--Records of the ESSR, 1972, No 34, art 365.

14. Archives of the TsSU ESSR, F. 1, op. 6, d. 798, l. 18; Archives of the VTsKP TsSU ESSR, f. 1, group 47, 1980, d. 32, l. 19.

15. Archives of the TsSU ESSR, f. 1, op. 6, d. 798, l. 18; Archives of the VtsKP TsSU ESSR, f. 1, group 47, 1980, d. 32, l. 19. Our Calculation.

16. Results of the 1959 All-Union Census, Estonian SSR, M., 1962, p 11.

17. Results of the 1970 All-Union Census, vol 1. M., 1972, p 7-9; vol 5. M., 1973, p 33.

18. National Economy of the Estonian SSR in 1980, p 12.

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QUALITY AND FAILING GRADES IN HIGHER EDUCATION

Moscow IZVESTIYA in Russian 4 Jun 84 p 3

[Article by V. Aynshteyn, professor, Moscow Institute of Fine Chemical Technology imeni Lomonosov: "Figures for Show"]

[Text] Any national-economic task is necessarily connected with moral problems. In higher school, this tie--of the occupational and moral making of a individual--i indissoluble.

But the training level of specialists exists today as though it were separate from indicators of progress. Among our graduates, there are quite many weak, ignorant engineers who are not ready to solve production problems and yet in terms of getting on in school, it would appear as though everything was quite all right. The vuzes use any means to avoid having these indicators lag behind the average established in accounting practice.

It is reported, for example, that in Voronezh University every third student group shows a full, 100-percent passing rate. At the Polytechnic and Pedagogic Institutes in Sverdlovsk, such groups, studying with no failing grades, amount to more than one-half. What does this mean? In four examinations per session, a group receives a hundred grades! The absence among them of even one failing grade is an event that simply cannot be frequent. Or we are shown as an example a republic chemical technology VUZ operating practically without any dropouts. At several related Moscow VUZ's, students are studying that have demonstrated good results on entering this institute and have been designated for study in the capital. But among them the dropout rate is very, very high.

In trying to raise the passing rate, rectorates attempt to "influence" instructors. Sometimes this is done tactfully--in the form of "explanatory" talks, sometimes--rigidly, at academic councils, with a count of who graded how many failures, and here and there--quite crudely, up to preventing them from giving a course. And the following takes place: the passing rate of a group is taken into consideration in the selection of its monitor [kurator] to a teaching position. Now he is personally interested in seeing that his students do not receive any failing grades. Thus conditions are created for holding of examinations on the principle: "You take care of my group, and I will take care of yours."

The examiners delay the students' vacations until they make up their grades. For students who fail to get the requisite number of passing grades, examiners no longer set up consultations but detailed repetition. Ministry instructions to the effect that a student who receives more than two failing grades is subject to exclusion are being openly violated. These violations have to be concealed. Let us say that instead of failing grades dots are placed or, what is worse, the assigned level of passing is maintained without impairment.

Is it possible the rectorates and deaneries are guided solely by ideas of prestige and the desire to be in good standing? The fact is something else: the personnel are rigidly linked to the student contingent. A ratio exists of approximately 11 students to an instructor. On the elimination of a group of eleven, the VUZ must lose an instructor. Here the pressure of the rectorate is predetermined, and no orders forbidding it can be of any help--instructors must be retained.

Look at what happens sometimes. Instructors, especially in junior courses, devote almost all their attention to the laggers--they must not be permitted to fail or drop out! And the good ones, who in the future will be moving science and technology, are short-changed of knowledge and emotions.

Our institute, the Moscow and Kazan Chemical Technology Institutes, the Leningrad Technology Institute, the Moscow Institute of Chemical Machine Building and others are proud of their graduates not without reason. And orders for the latest technological processes and equipment for them are placed by our country in Japan, France and Italy, paying with foreign exchange and natural resources. Of course, technical progress is inevitably accompanied by international division of labor. But acquisition of foreign technology is without exception an obligatory measure. If in some sectors of production, our graduates have been unable to develop effective technological processes, the main share of responsibility for this falls on higher school.

I do not ask for a reduction of the passing rate nor for an increase in the dropout rate. I affirm something else, that it should not be permitted for previously established quantitative indicators to distort the true picture of achievement of this or that VUZ.. These figures not only work against the quality of our production--they distort the moral climate of the institute and lead to deliberate laxity.

All the students know about the ratio and restrictions in regard to dropouts. A consumerist approach is provoked: it turns out that even from a student's desk it is possible to snatch something from the state--a passing grade instead of a failing one. This takes place against a background of calls for determined study, fulfillment of duty and the like. Thus there emerges a gap between word and deed, deception in relations between elders and juniors. The student is relieved of responsibility for his study work and actions. It is shifted onto the instructor and the monitor. And absence of responsibility inevitably promotes dependence.

Pursuit of the passing indicator also has a bad effect on the teaching corps, especially on the young. If a demanding lecturer is scolded for

an excessive number--where is the limit?--of failures on an examination, while a nondemanding one is praised, then other instructors willy nilly make appropriate conclusions from this.

It is specifically absence of demands that creates the soil for abuses concerning which we, alas, frequently read with bitterness in the papers. Perhaps even more dangerous is protection in admittance, promotion from course to course--it is more difficult to disclose, more difficult to raise public opinion against it, for someone is made happy "in the interest one's own institute." In the VUZ, where strict high standards reign, the possibilities for this are greatly reduced. There is no meaning, let us say, in dishonest registration in a VUZ--such a student will fail in the first session.

Our national economy now aims at the end result. Everybody understood that an attempt to make of paramount importance an intermediate result is fraught with social losses. But what should be taken as the end result? For higher school, it is naturally, a qualified specialist, trained for progressive technical solutions. And when percentages of those who succeed and drop out are taken as a result, the task changes: the VUZ begins to work on itself, and its work is judged by its reporting.

But the danger of such an approach was pointed out even in the '20s, at a time of an acute shortage of engineers, by a special directive of the People's Commissariat of Education under whose control higher school was at the time. It warned that "no inflated figures of students' progress, figures for show, were to be cited by VUZ's and that students that were poorly prepared were under no condition to be promoted to the next courses. Let this externally mean a reduction in the percent of those promoted from course to course. Actually, this means growth of the students' progress rate, strengthening of the operation of higher school, increasing its demands on oneself." Recently, reporting on the progress rate on secondary school has been abolished. Should not the same thing be also done in higher school? Only then can marks become an effective instrument of intra-VUZ control of the teaching process.

But it is not enough to abolish reporting. The excessively rigid inflexible tie between the number of instructors and the number of students must be broken. And what if one should be guided solely by the number of those entering the first course? Here, probably, the training of each specialist will be somewhat more expensive to society. But it is time to look at the financial side of higher education not through the prism of VUZ estimates but rather on the basis of social need for radically raising the quality of training of VUZ graduates while taking into consideration long-term economic and social consequences. Today this is the main consideration for our work.

7697
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KVASHA COMMENTS ON RECENT MONOGRAPHS ON DEMOGRAPHY

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 3, Mar 84 pp 121-123

[Article by A. Kvasha: "Demography and the Present"]

[Text] It was noted at the 26th CPSU Congress that demography is one of the directions of the social sciences, whose development we should concentrate our efforts on during the 11th Five-Year Plan.[1] It is impossible to introduce scientific research into practice in national economic planning if scientists and practical workers do not have knowledge of the latest achievements in foreign and domestic science. There is no specialized demographic journal in our country, yet wide public knowledge of contemporary research on questions of demography is important for a proper understanding of the present trends and prospects of population development, the mechanism of the interdependence of economic and demographic processes, and problems of demographic policy.

In recent years many works about the problems of population growth have been published both in the central and republic publishing houses. A number of serial publications as well as monographs about the stated problems have been published in the publishing house "Finansy i Statistika" where an editorial staff specializing in demographic literature actively works on these problems. We should note among them the series "Novoye v zarubezhnoy demografii" [Developments in Foreign Demography]. Translations of the most interesting works of foreign authors, basically about problems of theory and practice of demographic analysis are found in it. In 1983 the collections "Kak izuchayut rozhdayemost'" [How Birthrate Is Studied] and "Demograficheskaya politika. Opyt sotsialisticheskikh stran" [Demographic Policy. The Experience of the Socialist Countries] were published in this series.

This publishing house also publishes a series of works under the general title, "Populyarnaya demografiya" [Popular Demography], which acquaints the mass readers with the fundamental points of the science of demography and the present trends of population development both in our country and abroad.

The thematic collection "Narodonaseleniye" [Population], which is issued four times per year, occupies a special place among these serial publications. More than 40 items in all have already been published. Each of the collections is devoted to one of the pressing problems of contemporary conditions.

For example, "Naseleniye mira" [World Population], "Naseleniye i trydovyye resursy RSFSR" [Population and Labor Resources of the RSFSR], "Demograficheskaya politika v SSSR" [Demographic Policy in the USSR], and others.

Of the large number of publications about demographic problems we must above all note the monograph "Vosproizvodstvo naseleniya SSSR" [Reproduction of the Population of the USSR], prepared by the associates of the department of demography of the NII TsSu SSSR [Scientific Research Institute of the USSR Central Statistical Administration].[2] Main consideration is given in it to an analysis of the evolution of types of population reproduction in their socio-economic causalities. The authors proceed from the idea that population reproduction consists of the unity of the processes of birthrate and mortality rate and their interdependence. Such a definition of said process is not unique in Soviet demography. A number of researchers also include migration in their concept of reproduction. There are even broader interpretations.

An analysis of the long-term tendencies of population reproduction should be based on the identification of general rules governing these processes and the stages of transition from one qualitative state to another, which is higher and more complex by its composition. The monograph being reviewed bases its division of the given process into periods on its conception of the so-called demographic revolution (or demographic transition) which is revealed in changes in systems of family values and relationship towards problems of birthrate, marriage and intensity of individual migration.

In its development the population passes through two qualitative stages or distinctive leaps--the transition from a high death rate to a low death rate and from a high birthrate to a low one. Socio-economic factors (they are analyzed in the book in detail) are the basis of these qualitative jumps, in particular of the relationship of the understanding of the role of children in the system of values of family life. The significance of the proposed idea lies in the fact that it makes it possible to determine basic directions of the transition of types of population reproduction in their socio-economic causalities and the inevitability of transition (with regard to the specific character of development of each population group) to a type of reproduction, based on low birth and death rates. This idea has a certain practical direction. However, the theory of demographic revolution has been exposed to criticism by a number of soviet scientists, above all for its weak connection with the development and transition of one social formation to another.

A great deal of factual material is quoted in the book and several facts, including birthrate trends and demographic behavior according to figures from a 1978 sample survey of TsU SSSR [USSR Central Statistical Administration], are introduced for the first time into practical scientific circulation. Figures from the mortality rate tables of the USSR population according to census data (including the tables from 1938-39) are widely used. Mortality rate trends are analyzed in detail in it and territorial differences in this process are shown. For example, with the help of the analysis of graphs indicating age of death (pp 111-122) it is noted that there are still reserves in the Central Asian republics for lowering the mortality rate from endogenous diseases.

The authors show how the type of demographic behavior of the population also changed against the background of socio-economic transformation. A thorough, detailed analysis of the intensity of birthrate and marriage trends in pre-revolutionary Russia is given in the monograph. One of the most interesting features is the clear-cut formulation of the concept of "marriage breakdown" in as much as the family can break down not only because of divorce, but also because of widowing. Trends to limit the birthrate appeared in our country, as well as among the Russian population, as early as the end of the 19th century.

The present trends in birthrate, marriage and divorce and family formation are investigated in special detail. A wide range of demographic indicators, including the "real generation" method taking into consideration the differentiation according to nationality and education of women, are used for these purposes.

The monograph reveals the influence of marriage levels on birthrate trends, examines contemporary problems of divorce, and traces trends in the stabilization of characteristic age of marriage based on material of a 1978 survey. It is shown that the increase in the number of divorces is connected with deep-seated social processes, above all with the actual economic and social equality of married couples. At the same time widowing also retains its significance in the break down of marriage along with divorce. In 1958-59 on the average for every 1,000 married couples, 18 broke up because of widowing and 8 because of divorce, and in 1970-79 these indicators were 16 and 13 respectively.

The birthrate processes as noted in the book differ seriously by union republics. For example, according to the figures of a 1978 survey, the average number of children of women born in 1929-1933, that is, those who have in all practicality completed the child-bearing cycle, varies from 2.00 in the Estonian SSR to 5.37 in the Tajik SSR. (pp 231-239)

The work concludes with research of the typology of reproduction of the USSR population, examination of the problems of replacement of generations by sex and age, and the specific character of the age structure of the population by sex. It is shown that the present type of population reproduction taking shape is very efficient from socio-economic standpoints.

The monograph being reviewed is an important contribution in the analysis of the trends in population reproduction in the USSR.

Among the books published in 1983 we should also pause on the monograph of A. S. Milovidov "Gody zhizni i gody truda" [Years of Life and Years of Labor].[3] This is one of the few works about the interrelationship of economic and demographic processes. The first chapter is devoted to an analysis of the replacement worker generations and the impact of the alteration in the birthrate level and the age-sex structure of the population on this process. Special consideration is given to the problem of the replacement of generations which depends on the existing level of birth and death rates, especially the fluctuation in the number of births. It is shown that growth

of the quality of population, including its educational level and the prospective retirement on a pension of a large amount of the population who have a relatively low level of education and are employed in manual labor, will make the mechanization of production easier and will resolve the problems of job placement of youth at a new qualitative level. (pp 35-37) At the same time the author rightly emphasized the necessity to take the fluctuation in the number of births into account in socio-economic planning.

The economic loading of the population and of its various social and age groups in comparison with the rate of economic growth are analyzed in the book. (pp 46-48) The calculations cited show that growth in economic loading, first of all among pension-age people under the conditions of an accelerated increase in productivity of public labor did not substantially influence the improvement of the material well-being of the population. The author gives a great deal of attention to researching the mortality rate and migration processes. The so-called coefficient of replacement worker generations, the essence of which is in the comparison of people entering the working age and those leaving it with an allowance for migration and mortality rate, is used widely.

In the second chapter A. S. Milovidov proposes a method for the construction of a "life budget." With the help of this model which is based on the use of a mortality rate table and the life expectancy of various conventional generations, the average length of each period of life (labor activity, dependency, and others) is calculated. This makes it possible in combination with estimates of production and consumption by age to show the economic profitability of generations. The proposed method may be used as a supplement to existing ways of analyzing economic-demographic conditions of the country.

Only after having studied the historical laws governing the population development is it possible to understand the present trends of population development in the USSR and foreign countries, learn to analyze them correctly, and reveal the motivating forces of the demographic processes. But the history of the population is inseparable from the history of demography as a science, from an understanding of the basic directions of its development in the past, and on this basis the possible ways for its improvement in the present and future. Unfortunately, there is very little work in soviet literature devoted to these problems.

To a certain extent the monograph of D. K. Shelestov "Demografiya: istoriya i sovremennost'" [Demography: History and Present Day], which is based on a great deal of factual material fills this deficiency. The work goes beyond a simple account of facts and definition of demography as a science. The author shows that demography arose as an independent social science in response to the need to consider population factors in social development and that statistics and demography were at first linked with a common foundation and appeared simultaneously not in succession. (pp 58-62)

The formation of Marxist-Leninist demography, the paths of development of research of population problems in our country are researched in detail in

the monograph. The necessity to activate historical-demographic research in the USSR was also noted and the basic directions of bourgeois demographic thought are also analyzed. As a whole the book is a significant step in the development of both a history of demographic thought and in the development of historical demography.

It seems to me that in the future it is necessary to activate the publications about problems of demography, including economic-demographic analysis (especially of the estimation of socio-economic consequences of various types of population reproduction).

FOOTNOTES

1. "Materialy XXVI C'yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, Politizdat, 1981, p 145.

2. "Vosprouzvodstvo naseleniya SSSR" [Regeneration of the Population of the USSR], under the editorship of A. G. Vishnevskiy and A. G. Volkov, Moscow, Finansy i Statistika, 1983.

3. A. S. Milovidov, "Gody zhizni i gody truda" [Years of Living and Years of Labor], Moscow, Finansy i Statistika, 1983.

4. D. K. Shelestov, "Demografiya: istoriya i sovremennost'" [Demography: History and Present Day], Moscow, Finansy i Statistika, 1983.

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12585
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EXPERTS DISCUSS MERITS OF SOCIAL INSURANCE DEDUCTIONS

Moscow FINANSY SSSR in Russian No 5, May 84 pp 34-37

/Article by Ye. M. Shabalin, docent at Moscow Institute of Management, and V. D. Perevezentsev, leading economist at the Construction Economics Administration of the USSR Bank for Financing Capital Investments: "Important Lever in Increasing the Efficiency of Utilization of Labor Resources"/

/Text/ There is no unity of views concerning the economic essence of workers' social insurance deductions. The majority holds the opinion that these deductions, along with profit and the turnover tax, are a specific form of net income. However, some scientists consider social insurance deductions an element of the production expenditures of enterprises.

Social insurance deductions are specific in the methods of their formation and utilization. In contrast to profit and the turnover tax they are of a pronounced purposeful nature, because they are earmarked exclusively for refunding part of the expenditures on manpower reproduction and are spent mainly on the payment of pensions, security for temporarily disabled workers and implementation of sanitary and preventive measures.

The economic purpose of these payments is different. For example, some of them are connected with the issue of temporary disability allowances and serve as distinctive wage supplements for workers and employees. Most likely, the necessary product will be the source of funds for such allowances. Such payments as the granting of preferential and free passes to rest homes and sanatoriums, their construction and maintenance, sanatorium-health resort services, diet therapy and other forms of financial assistance for workers do not differ from similar payments from public consumption funds, for which the surplus product is the predominant source of formation.

The peculiarities of this form of net income are also manifested in the fact that social insurance deductions represent an integral part of production costs, not of the wholesale price. Deductions are made according to established norms (rates) from the wage fund of enterprise workers. The fact that the social insurance deductions of enterprises are included in production costs served as the basis for some economists for excluding them from the structure of net income.[1]

The supporters of this point of view do not take into consideration the peculiarities of this form of net income. Social insurance deductions, despite the fact that they are included in the production costs of the enterprise where this part of society's net income has been realized, do not fully remain at the enterprise itself. Some of them are at society's disposal and are entered in the state social insurance budget. Subsequently, these funds are distributed by the state and often are not at all utilized at the enterprise where they have been included in production costs. At the same time, payments from the state social insurance budget are determined by the actual needs for these purposes and their amount depends neither on the size of the appropriate contributions of an enterprise, nor on its profitability.

Therefore, the inclusion of social insurance deductions in the production costs of enterprises is not substantiated economically. It leads to a distortion of production costs and profit. Special investigations in this field conducted by other economists have shown the following: "According to tentative estimates, these deductions increase the production costs of industrial output by more than 2 percent."[2]

In connection with the increase in the rate of contributions for state social insurance in trade unions as of 1 January 1982 the distortions in the production costs and profit of enterprises have become even more significant. Under these economic conditions it is advisable to make the social insurance deductions of enterprises from proceeds from the sale of output. Such a procedure of planning and calculating contributions to social insurance will more correspond to the economic content of this independent form of society's net income.

Intensification of the role of social insurance deductions in the mechanism of socialist management requires a more profound knowledge of the functions performed by this economic category. Usually, the problem of the functions of social insurance deductions is not examined in the special literature on the theory of finances. Of course, this does not mean that this category has no functional load. As a financial category social insurance deductions should perform primarily a function common for all financial categories, that is, to be a source of formation of funds of monetary assets. This function is common and specific for finances and mandatory for any financial category.

At the same time, within the limits of a common unity each financial category has its characteristic features of manifestation of this function. The possibility of being a source of formation of funds of monetary assets, both centralized and noncentralized, is such a characteristic feature for profit. However, the main function of the turnover tax is to be a source of formation of state budget revenues.

Of course, social insurance deductions also enter the state budget. However, one can hardly agree with the economists who see in this the main attribute of this financial category. For example, V. V. Sitnin writes the following: "Social insurance deductions are primarily some of the budget revenues."[3] In our opinion, the possibility of utilizing social insurance deductions for covering part of the expenditures on manpower reproduction is the chief thing for a

description of their economic essence. At the same time, along with the payments of social insurance to the state budget, it is theoretically possible to partially utilize these deductions directly at the enterprises themselves, including the expenditures on manpower reproduction that are now financed from the state budget; for example, for covering the expenditures on personnel training.

Thus, the possibility of utilizing social insurance deductions for covering part of the expenditures on manpower reproduction can be considered the basic purposeful function of this financial category.

The other function of social insurance deductions is connected with the intensification of the interest of enterprises in a more efficient utilization of manpower. The following is stated in the decree of the 26th CPSU Congress: "To increase the productivity of public labor by 17 to 20 percent and, as a result of this, to obtain no less than 85 to 90 percent of the increase in national income."[4] The system of financial-credit levers, among which a prominent place should belong to social insurance deductions, is also to contribute to the solution of this important problem.

The objective possibility of utilizing social insurance deductions for the stimulation of the cost accounting interest of enterprises in increasing labor efficiency is inherent in their very essence. The fact that as yet we are unable to fully realize in practice the potentials inherent in the stimulating function of this category is another matter.

For example, social insurance can contribute to a reduction in labor turnover. Thus, temporary disability allowances are paid to workers and employees on the basis of a percent of the wages differentiated depending on the length of continuous service at one enterprise. Allowances at the rate of 100 percent of the wages are paid only to individuals having a continuous length of service of no less than 8 years. Or, for example, a procedure of payment of pensions, according to which increments are paid depending on the length of continuous production service. Implementation of preventive and sanitary measures at the expense of social insurance deductions contributes to some extent to labor productivity growth.

However, experience in the utilization of these deductions does not give reason to believe that the combination of the examined measures contributes to a sufficient degree to the cost accounting interest of enterprises in a decrease in the size of personnel and increase in labor productivity. In part this is connected with the fact that payments of pensions and temporary disability allowances affect primarily the personal interests of workers and employees. However, the stimulating effect on the work of the collective is obviously insufficient. Moreover, since social insurance deductions are now included in the production costs of enterprises, they are a price forming factor. This affects general state interests.

For a long time the economic literature has discussed the problem of the need to intensify the effect of the financial-credit mechanism on the utilization of labor resources by enterprises through the introduction of a payment for them. This is motivated by the fact that expenditures on manpower reproduction

are financed basically with the state budget, not with the funds of enterprises. As a result, enterprises allegedly are not able to actively affect the efficiency of utilization of labor resources.

Of course, allocations from the state budget constitute a significant part of the expenditures on the state social insurance budget. However, is it really possible to raise the problem of fully financing the expenses on manpower reproduction with the funds of enterprises? Manpower reproduction includes expenditures on public health, housing and municipal services, education, cultural and educational services and so forth. These expenditures are of economic, as well as social, significance and, therefore, are financed primarily with centralized general state funds.

At the same time, this does not eliminate the need to stimulate the most efficient utilization by enterprises of the labor resources available to them. However, is it worth introducing a payment for manpower utilization in this case? Of interest is D. A. Allakhverdyan's opinion: "Under socialism manpower is not a commodity and it is difficult to theoretically substantiate the payment for it."[5] Of course, in a socialist society manpower is not a commodity. The right to labor for Soviet citizens is guaranteed by the USSR Constitution. At the same time, labor resources in the country are distributed in a planned manner with due regard for the interests of the entire national economy, not of individual enterprises. Under these conditions the payment for manpower utilization should not be effected by the same methods as the payment for other production resources.

Special payments to the budget are applied in some CEMA member countries for the intensification of the cost accounting interest of enterprises in improving the utilization of labor resources. In the Hungarian People's Republic, in case the established limits of wage growth are exceeded, enterprises pay the appropriate tax to the state budget. In the Polish People's Republic the wage fund tax with a rate of 20 percent is one of the immediate payments from profit. In the Mongolian People's Republic payments for the wage fund at the rate of 6 percent of its sum are made to the budget.[6] In the mentioned countries payments to the state budget for labor resources are made from profit. Simultaneously with these payments enterprises in all CEMA member countries make deductions from production costs for state social insurance, which are also connected with manpower utilization.

Evidently, V. S. Pavlov is right, considering "it inadvisable to introduce a special payment for labor resources. The problems in this area can be solved with no lesser success without an expansion of the number of payments to the budget."[7] Social insurance deductions in the practical utilization of their stimulating function can fully be such an effective lever of intensification of the cost accounting interest of enterprises in increasing labor efficiency. Realization of the stimulating function of social insurance deductions is closely connected with the function of covering part of the expenditures on manpower reproduction. This dependence is expressed in the fact that both functions are united by one goal and are aimed at improving the utilization of the labor resources of enterprises. At the same time, the stimulating function of social insurance deductions should not be considered separately from the entire production stimulation system.

Thus, social insurance deductions reflect the following functions characteristic of them: covering part of the expenditures on manpower reproduction and stimulating the efficiency of manpower utilization.

In the intensification of the cost accounting role of social insurance deductions it is important to find an economically advisable level of rates of enterprise contributions.

In accordance with the decree dated 23 January 1980 of the USSR Council of Ministers "On the Rates of Contributions for State Social Insurance for Trade Unions" higher, new rates were introduced on 1 January 1982. In basic industrial sectors, as a rule, they were established at the level of 14 percent of the wage fund of workers of enterprises, associations and organizations. Rates are differentiated in trade unions. The lowest rate is applied for agricultural workers (6 percent). The new rates ensure a fuller refund of expenditures on the reproduction of labor resources from enterprise funds, which makes it possible to stimulate an efficient utilization of manpower.

With the introduction of new rates the effect of social insurance deductions on the basic cost accounting indicators of the work of enterprises, associations and national economic sectors has increased markedly.

Intensification of the cost accounting role of social insurance deductions creates favorable possibilities for the activization of the stimulating function of this economic category. Examining these stimulating possibilities, it is necessary to have in mind that, in fact, social insurance deductions can contribute to a more efficient utilization of manpower, not only when their effect is manifested not in an isolated manner, but in the system of levers of the financial-credit mechanism of production management with the necessary orientation of the interest of enterprises in the end results of their cost accounting activity.

We will dwell on the problem of activization of the stimulating function of social insurance deductions from the positions of improvement in the financial-credit mechanism of management of enterprises, associations and national economic sectors. The stimulating possibilities of these deductions as a financial lever are realized in an obviously insufficient manner. This is due to a number of reasons: lack of interest on the part of enterprises in reducing expenditures on manpower reproduction; weak interconnection of social insurance deductions with the indicators of the efficiency of utilization of labor resources; lack of dependence of material incentive funds on the fulfillment by enterprises of their obligations with respect to this payment to the social insurance budget; local effect of this financial lever without consideration of the end results of enterprise work and the necessary coordination of a single financial-credit mechanism of management with other financial levers.

In our opinion, the necessary degree of interest on the part of enterprises in increasing the efficiency of utilization of labor resources can be attained if the mechanism of effect of social insurance deductions is adjusted to the cost accounting interests of labor collectives. For this purpose it is suggested that ministries, departments, associations, enterprises and organizations, when they fulfill production and profit plans with a smaller wage fund

than envisaged in the plan, be granted the right to leave the saving on social insurance deductions at the disposal of production collectives. The contributions of enterprises and organizations to the social insurance budget are reduced by this amount respectively.

Previously we have noted that the stimulating effect of these deductions is directed primarily toward the satisfaction of personal interests, whereas collective interests are affected insufficiently. In this connection it seems advisable to include the attained saving on social insurance deductions in the fund for social and cultural measures and housing construction. The basic directions in the expenditure of this fund include housing construction, implementation of sanitary measures, reduction in the cost of nutrition for workers and employees and their children and other measures for the social development of labor collectives. These expenditures have the most direct relationship to manpower reproduction and their financing meets primarily collective interests.

The stimulating possibilities of social insurance deductions are different at enterprises of individual national economic sectors and even within the limits of these sectors, because the wage fund together with social insurance deductions has a different proportion in the structure of expenditures on output. For example, in the structure of expenditures on industrial output in 1981 wages with social insurance deductions throughout industry comprised 14.8 percent, whereas throughout the timber procurement industry, 37.9 percent and in the cotton cleaning industry, only 1.6 percent of the total amount of expenditures on production.

Therefore, for the enterprises of such sectors, as well as for the enterprises that have a small amount of saving on social insurance deductions, it is more advisable to sum up the funds obtained as a result of the decrease in the contributions to the social insurance budget with the funds obtained as a result of the saving on the wage fund as compared with the standard or planned fund. These sums can be utilized by enterprises for the payments of wage rate and salary increments for workers for holding two jobs and the performance of the established volume of work with a smaller number of workers and to engineering and technical personnel for high skills. The indicated increments are of a temporary nature and are cancelled when work indicators are worsened.

FOOTNOTES

1. See: A. Birman, "Ocherki teorii sovetskikh finansov" [Outline of the Theory of Soviet Finances], Moscow, Finansy, 1972, p 56.

2. V. N. Maslennikov and D. S. Molyakov, "Denezhnyye nakopleniya v promyshlennosti" [Monetary Accumulations in Industry], Moscow, Finansy, 1979, p 79.

3. V. V. Sitnin, "Chistyy dokhod" [Net Income], Moscow, Mysl', 1974, p 83.

4. "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, 1981, p 141.

5. See: "Finansy, kredit i tseny v khozyaystvennom mekhanizme sotsializma" /Finances, Credit and Prices in the Economic Mechanism of Socialism/ Moscow, Nauka, 1979, p 53.

6. See: "Finansovyye aspekty upravleniya promyshlennost'yu stran-chlenov SEV" /Financial Aspects of Industrial Management in CEMA Member Countries/, Moscow, Finansy i Statistika, 1981, p 20.

7. V. S. Pavlov, "Finansovyye plany i balansy v sisteme ekonomicheskogo planirovaniya" /Financial Plans and Balances in the Economic Planning System/, Moscow, Finansy, 1978, p 226.

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